NOV/1983

PurchasingWorld

Transportation strategies

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Profile of the purchasing professional

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PurchasingWorld

Vol. 27, No. 11 - November 1983

Helping you manage the business of buying

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Editorial Director
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Editor
Richard L. Dunn

Executive Editor
Robert S. Reichard

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Thomas F. Dillon

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Purchasing and the Law
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Value Analysis
Lawrence D. Miles

Materials Management
Ernest C. Huge

Negotiating
Louis DeRose

Editorial offices:
801 S. Northwest Highway
Barrington, Ill 60010
Phone: 312—381-5971

* Metalworking issues

PW PREDICTS

Robert S. Reichard, executive editor

1984 increases will be modest

Discount talk of any sizeable inflationary surge. That's not to say, of course, that there won't be some price acceleration as the economy continues to move up. (About 4% real growth is projected for next year—on top of the big 5%-plus racked up over the 12-month period ending fourth-quarter 1983.) But the increases should be modest by past recovery standards.

More important, all this optimism is based on more than just wishful thinking. Moderation is suggested by:

- **Restrained wage demands:** There's little sign of any big jump here—as high unemployment rates (8-9% projected for 1984) continue to keep union demands within bounds. Indeed, in such high unemployment industries as trucking and airlines, wages are actually heading lower. White-collar salary gains are also likely to remain in the relatively low 6.3% range.
- **Competitive pressures:** Buyers should still have considerable bargaining leverage—despite a slow creep up in factory operating rates (expected to rise into the low 80s by sometime next year). Credit this situation to a combination of factors, including: (1) deregulation—particularly in the transportation and communications sectors, (2) the increasing importance of productivity-oriented and often nonunionized hi-tech industries, and (3) continuing import bargains stemming from a still-strong dollar.
- **Improving profit performance:** The combination of higher operating rates (which, other things being equal, reduce unit costs) and relatively small raw material cost increases promise much improved bottom-line performances—and hence less vendor pressure to post large, across-the-board price increases. After-tax profits are projected to rise 15% this year and 10-15% in 1984.
- **Moderate food price increases:** Not even the recent drought has changed this appraisal all that much. Indeed, the average 1984 supermarket bill is expected to show only a 4-5% increase.
- **Stable interest rates:** These will remain in the uncomfortable 10-11% range. But the point to remember is that they won't be going up, so there won't be any new upward pressure on price yardsticks—particularly on the cost-of-living index which is heavily influenced by mortgage rate fluctuations.

Econometric models would also seem to support this basically "no-sweat" inflation prognosis. Average the GNP price forecasts of three top forecasting models (Wharton, DRI, and Chase), and you come up with a less-than-5% increase for 1984—quite modest in view of the continuing GNP growth anticipated over the period.

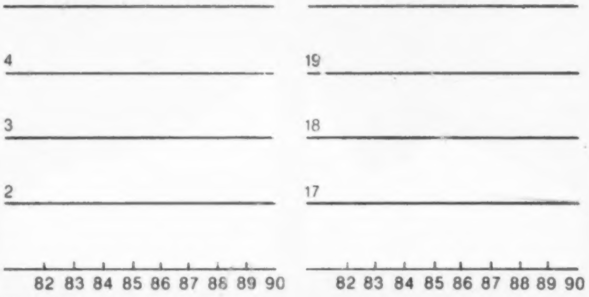
Steel (stainless)

Producers are making another attempt to reduce big distributor discounts on flat-rolled products—announcing new schedules that are targeted to go into effect in January. Plans call for these discount cuts: plate mill steel (from 30% down to 20%), and continuous mill plate (from 25% down to 15%). There's a fair chance the sheet hikes will hold. But the plate market, still held down by poor capital equipment demand, looks to remain shaky.

Steel (carbon)

Prices on flat-rolled sheet

Natural gas into 1990



Prices

Dollars per million BTUs (wellhead)

Production

Trillion cubic feet (dry basis)

Source: Resource Planning Consultants

The lull in natural gas and natural gas liquid prices isn't likely to last—at least not if you're talking about the longer run.

New estimates by Philip E. Watters (vice president of Resource Planning Consultants of Houston) provide the details. Speaking at a recent Energy Bureau conference, Watters puts the average wellhead price at $3/million BTU by 1986—some 15% above current (1983) estimates. And by 1990, the average quote should be up another 48% (to $4.45/million BTU).

The increases reflect expectations that the current supply glut will disappear. Other upward-tugging factors include continuing gradual decontrol of prices and declining domestic output which should be down to 17.1 trillion cubic feet a year by the end of the decade (versus 19.4 million tcf in 1981).

A similar outlook for natural gas liquids is projected. The cents/gallon forecasts here (1985 vs 1983): propane (53.4¢ versus 50.2¢), and ethane (38.1¢ versus 30.0¢). One exception is butane where a fractional decline over the two-year period is seen. But all should be up significantly over the subsequent five years—with the 1985-89 increases estimated as follows: propane (37%), ethane (46%), and butane (37%).

Copper

CURRENT SITUATION: The red metal continues to take its lumps—with prices off some 10¢/lb from recent spring highs. Part of the softness can be traced to disappointing demand. Glutted supplies are still another factor. Exchange-hungry Third World countries continue to produce as if there were no tomorrow, and some previously closed U.S. operations are being resumed. Add in lack of speculative interest, and it's easy to see why tags in recent days have dropped below 70¢/lb.

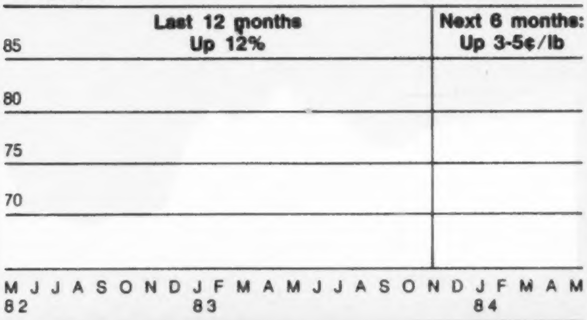
DEMAND: Even with some modest fourth-quarter gains, domestic shipments for 1983 as a whole should run only about 4% above a disastrous 1982. **Consumption, expected to rise 6-7%, isn't all that bullish either—given the precipitous declines of recent years.** Indeed, 1983 use totals should still be some 12% under 1978-1979 peaks. And it could take until 1986 or 1987 for consumption to reattain earlier peaks.

SUPPLY: The glut is here to stay. Total stocks are now well over 1.25 million tons. Any drawdown will be slow and gradual, so **1984 also looks to be another year of excess supplies.** Also reassuring on the supply front: Given current demand projections, Free World producers will still be hard put to justify anything above an 80% operating rate before early 1985.

PRICE OUTLOOK: Tags may be ready to bottom out (recent 70¢/lb quotes aren't nearly enough to recoup production costs that include 7-15¢/lb to cover pollution abatement). **But any large increase will be slow and gradual.** For example, it could well be the second-half of 1984 before prices reach the 90¢/lb level—as longterm demand rises only about half as fast as the 3-4% rate of the past few decades. **As for reachieving the old (early 1980) dollar-plus highs—that's still nowhere in sight.**

Copper cathode

Cents per pound



remain all over the lot—with not all buyers paying the recently posted 7% increase. Some big-volume users, for example, say they have received price protection at the old level as far as out December.

Demand, meantime, seems to be gradually improving—with fourth-quarter shipments now expected to top the 18.5-million-ton mark—up a fair amount from the estimated 17-million-ton third quarter. And next year, the industry is tentatively talking in terms of a good-sized 12-13% gain.

Computers

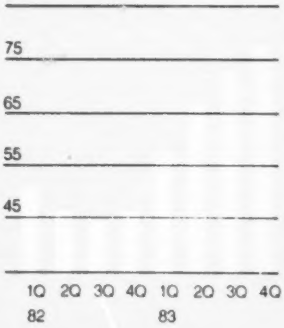
Look for more competition in the personal computer sphere—especally in the knee-top (14 lb or under) models aimed at the high end of the home and the low end of the business markets. By yearend, more than a half dozen outfits will be fighting for a piece of the action. Prices will range anywhere from $400 to $4000—but could slip significantly as the competition heats up. In another development, AT&T within six months is expected to challenge IBM's control of the PC market with its new system based on 32-bit technology. It's something that could well spark IBM price cuts.

Aluminum

Fundamentals are still strong—with quotes up 30-35% over the past few months. Producer ingot now commands over 80¢/lb—with comparably high tags for most fabricated lines. Producer orders, too, remain buoyant. Year-to-date advances are put in the 20%-plus range—and operating rates have moved over the 75% mark. Another plus: declining inventories—as Free World stocks drop more than 30% under year-earlier levels. But there should be enough to go around. As for future prices, a 90¢/lb ingot quote is still a good bet for mid-1984—especially if overseas demand also picks up.

Aluminum

(Market price, ¢/lb)



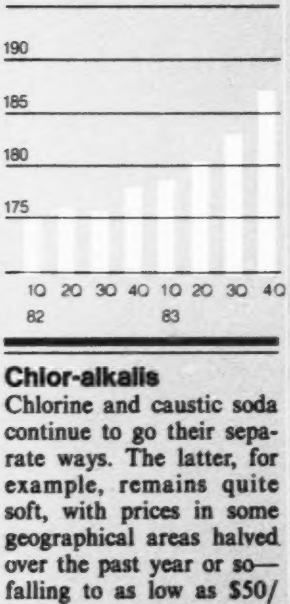
Zinc

Quotes have temporarily stabilized. True, U.S. consumption is up 12% over the first half, and the Chinese could double their imports (to near 200,000 metric tons). But much of this bullishness is offset by lackluster European demand. Counterbalancing factors are also noted in inventories where high LME holdings offset declining U.S. stocks. In any event, it's hard to make a case for any protracted price runup. True, quotes could eventually move into the 50¢/lb range—but probably not before mid-1984.

Electronic components

Semiconductor orders continue to boom. Indeed, one recent estimate puts them as much as 50% ahead of shipments. Prices, too, have been firming—with the popular 64K dynamic RAM commanding $5-6/unit—nearly double the $3/unit low of a while back. But prices on some new lines could soon be coming down—the new 256K dynamic RAM (now around $100/unit) could drop to under $20 within a year or so.

Electronic components prices
(Index 1967 = 100)



Chlor-alkalis

Chlorine and caustic soda continue to go their separate ways. The latter, for example, remains quite soft, with prices in some geographical areas halved over the past year or so—falling to as low as $50/metric ton. Chlorine, on the other hand, has experienced five consecutive quarterly boosts—totalling near $100/ton (reflecting vastly improved downstream demand). But supplies, acording to buyers, are beginning to loosen up—suggesting a period of relative stability for this key inorganic chemical.

Fertilizers

Some fairly significant price increases could be in the offing for next year as consumption finally begins to move up. Use of nitrogen, for example, could be up 22% over the 1983-84 fertilizer year—with a smaller, though still substantial 15% increase anticipated for both phosphates and potash. The gains, if they materialize, could push ammonia, for example, into the $175-190/ton range by sometime next year—with area quotes moving up into the $168-183/ton range.

Silicones

Prices are beginning to move up—with scattered boosts ranging from 4% all the way to 20% on selected formulations. Behind the boost: a big 10-20% jump in buying by the auto and construction industries. But whether all will hold up is questionable—given the recent competitive pricing by G.E., reduced French quotes, and the threat of oversupply. On the latter score, both G.E. and Union Carbide have substantial capacity on the way.

Paper and products

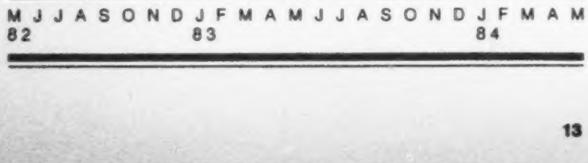
CURRENT SITUATION: Markets are firming in paper, paperboard, and most paper packaging areas. Pricewise, most fine papers have moved up, or are in the process of doing so. Linerboard, meantime, has moved up to $290/ton—some $40 above early-1983 quotes. Solid bleached board is up about $30/ton—though some discounting is still reported. And while paper packaging tags haven't as yet moved up all that much, demand remains strong—with corrugated shipments up 6% so far this year.

DEMAND: Overall paper and paperboard production should be up some 6% this year (to near 66.7 million tons)—with an outside chance of a 7% rise, if inventory building continues. Next year, linerboard demand could be up 5-7% as corrugated rises a similar amount. The outlook is also bullish for fine papers, where consumption could rise 4% above this year's estimated 7% advance.

SUPPLY: New capacity coming on stream will be modest. The most recent API estimate, for example, suggests 1.3% and 2.1% annual gains for board and paper, respectively, over the 1983-1985 period. Currently, utilization rates are still in the "no sweat" range—with averages for 1983 estimated as: unbleached kraft linerboard (92%), solid bleached board (91%), recycled board (78%), uncoated groundwood (87%), and coated papers (90%).

PRICE OUTLOOK: Improving market balance spells further—though moderate—hikes. Next year, linerboard prices could average $310-315/ton—well above the $275/ton 1983 average. This should put upward pressure on corrugated (a ***Purchasing World*** survey points to 3-7% advances). And a Wharton Econometric estimate puts the **average 1984 advance for all paperboard containers at near 4%.** As for fine papers, increases here will be modest, too—mostly in the tolerable 4-6% range.

Paper and products
Index: 1967=100



Construction equipment

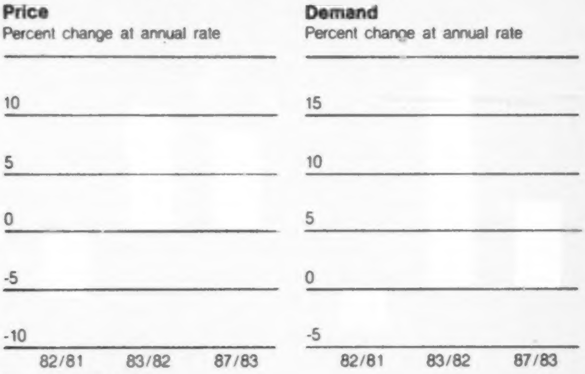
Still a buyers' market here—as one big firm starts offering $3000 rebates on some items. Other manufacturers, meantime, effect substantial discounts off lists which have remained substantially unchanged over the past few quarters. Behind the easiness: (1) failure of sales to increase despite the housing pickup, (2) slack export demand, and (3) heavy import competition. Weakest areas: Large equipment items used in heavy construction and coal mining.

Lead

A strong fall push has lifted tags well above the 15¢/lb low of late summer. Much of the upward impetus can be traced to better battery demand—with other factors including (1) reports of renewed Russian buying and (2) a big decline in U.S. producer inventories.

But the new higher tags could be vulnerable—given high LME stocks (well over 200,000 metric tons), less-than-firm LME quotes, and year-to-date declines in U.S. consumption. Given these latter factors, it may be mid-1984 or later that the heavy metal can approach the 30¢/lb barrier.

Plastic markets into 1987



Source: Arthur D. Little Inc.

Some fair-sized plastic resin price boosts may be in the offing over the next few years.

At least that's how analysts at Arthur D. Little see it. Presenting their views at the 9th Annual Conference on Plastics, they project an average price of 72¢/lb for these versatile synthetics by 1987—up some 20¢/lb from the estimated 1983 average and the equivalent of about an 8½% annual increase.

Based on the sharp declines of the past few years, however, these increases aren't all that big—especially if you factor in a 5% overall inflation rate. It means that in real terms prices will be advancing less than 4% a year—hardly enough, according to Arthur D. Little spokesmen, to move some product lines back into the black.

Demand increases, meantime, will continue to outrun overall economic growth—with about 58.5 billion lb of resin expected to clear the market in 1987—about 14 billion lb above estimated 1983 levels and the equivalent of about a 7% annual rate of gain.

One major assumption behind these forecasts: no new oil price runup. The assumption here is that oil prices in real terms will hold steady through 1984 and then rise gradually (1-2% a year) through 1987.

Polystyrene

Recent 3-5¢/lb price increases seem to be holding—on a combination of rising monomer costs (now up near 35¢/lb) and substantially improved end-use demand. Sign of the times: One vendor now lists its general purpose resin at 45¢/lb. Other lines are moving up, too—with ignition-resistant grades listed in the 90¢/lb-plus range. True, discounts are still available on many PS formulatons. But they're both smaller and becoming a lot harder to find these days.

Ethanol

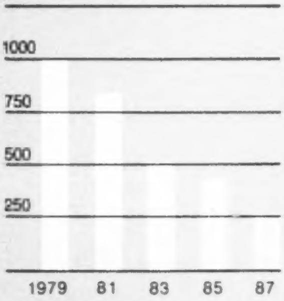
Prices of synthetic material remain under downward price pressure—both from increasing supplies of competing fermentation alcohol and cheap imported material. Shop around, and you can probably find material anywhere from 7-10¢/gallon under the official $1.70-1.80/gallon list level.

Computer terminals

Competition is keen—particularly from low-cost Asian suppliers. The average list price for so-called "dumb" (without computer capacity) terminals, for example, has dropped down to $500. And further declines seem certain, with another $100 or so expected to be lopped off the going quote by 1985. Declines are equally precipitous in 'smart' (limited computer capacity) types—where average prices are already under $1000 (some one third off levels of just two years ago).

Computer terminal prices

(Dumb—no computing ability)

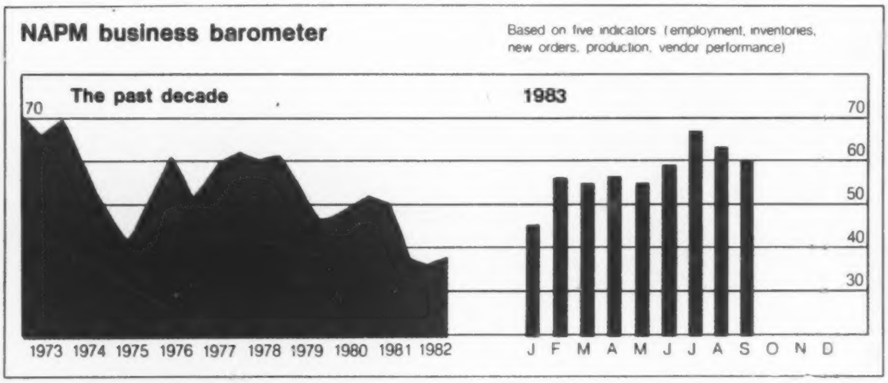


Source: Dataquest, Inc.

Synthetic fibers

The recent 7¢/lb increase in polyester staple is running into considerable flak. True, prices are up a bit—but more in the order of 4¢/lb, which birngs the going price up into only the 77¢/lb range. Behind the smaller increase: ample supplies and the recent easing in competing cotton quotes.

BUSINESS DATATRAK


NAPM business barometer

Based on five indicators (employment, inventories, new orders, production, vendor performance)

KEY ECONOMIC TRENDS

Slower pace projected for GNP gains

Growth is still the name of the game. But there are a few spotty signs that the rate of increase may be slowing down a bit.

Right now it looks as if the current (fourth) quarter will show a real GNP advance in the order of 5% (seasonally adjusted annual rate). This rate is well under the big 8% increase racked up during the April-June period.

But most economists are actually cheering this new trend—seeing it as a sign that the economy is not overheating and that modest, sustainable advances will continue into 1984.

NAPM survey

One sure-fire sign of more moderate growth ahead comes from the NAPM Business Barometer. The bellwether index's latest 60 reading (chart above) represents the second consecutive monthly decline.

On the other hand, it's important to keep in mind that this key barometer of near-term change is still above the natural 50 mark.

Also indicative of less-than-sensational growth are still-high interest rates. While certainly down from the prohibitive levels of last year (top chart alongside), there is no indication that they'll fall back down to single-digit rates. The big problem here is the huge close-to-$200 billion Federal deficit, which will prevent a meaningful loosening up in credit policy.

On a more reassuring note, recent production and sales increases seem to have turned the inventory curve around. The increases in business stocks over the just-ended third quarter are relatively small ($5-10 billion at annual rate). Nevertheless, they're in sharp contrast to the steady paring of the previous six quarters.

Inventories

This up-tilting inventory trend is also being helped along by continuing gains in new orders. On the durable goods front, for example, new bookings are coming in at near a $90-billion monthly rate (center chart)—close to $20 billion above the lows of last fall.

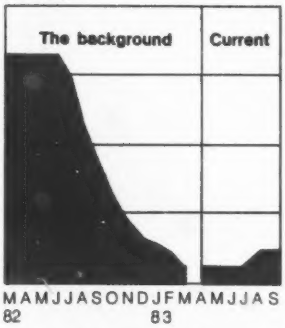
That's not to say that all sectors are booming. For example, capital equipment orders still leave a lot to be desired. But even here there are signs of improvement—with machine tool bookings up a bit over recent months.

Construction

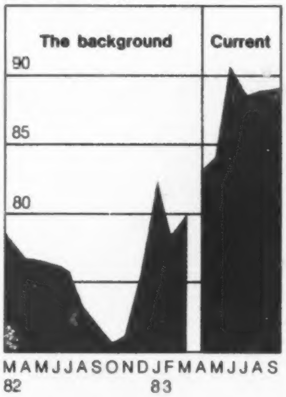
Still another pleasant development has been the continuing good construction showing—with housing starts averaging well over 1.7 million units at annual rate over the past few months. On the other hand, some levelling off here is possible if housing permits (a lead indicator

Leading indicators

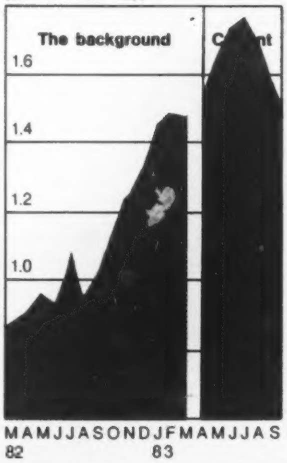
1. Prime interest rates
(Percent)



2. Durable goods orders
(Bil. $, seas. adj.)



3. Housing permits
(Millions, seas. adj.)



BUSINESS DATATRAK

of future activity) continue to drift lower.

But even if there is some slippage in housing, the longrun prognosis here is good. A recent Harris poll suggests that 13% of responding families will be in the market for a new home during the next two years—up substantially from the 8% who actually purchased one during the past two years.

Autos

The consumer buying potential, incidentally, also applies to autos. Some 31% of the queried households indicated they would buy a new vehicle during the next 24 months—again well above the 24% who actually bought one in the past two years.

Shift to larger cars

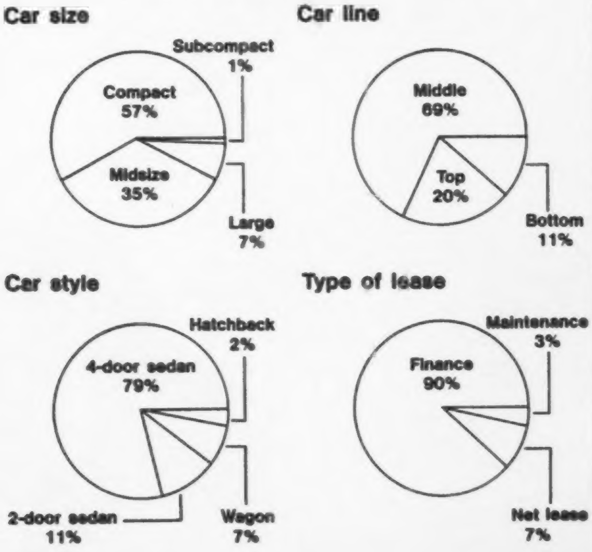
Bigger cars are "in" again. So say fleet managers responding to the new 1984 model National Association of Fleet Administrator's (NAFA) survey.

More to the point—they say that orders for larger vehicles (all except compact and subcompact) will make up a fairly substantial 42% of their overall purchases this year—up from only 30% in the year that just ended.

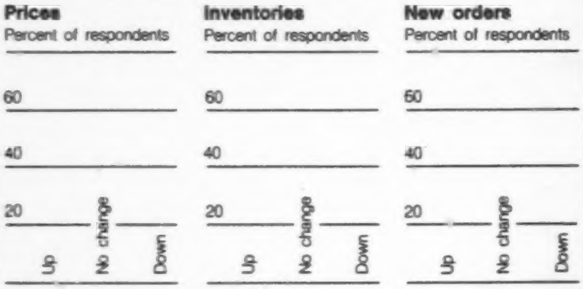
Other key trends suggested by the new survey:

- There's increased interest in manual transmissions. In fact, some 15 of the 174 fleets queried indicate they will order all units with manual transmissions on their 1984 new-car orders.
- Middle-of-the-line models will continue to get the big play (69%)—with only 20% and 11% opting for top and bottom-of-line models, respectively.
- Four-door sedans remain the most popular (79% of all new orders). And the percentages for other body styles: Two-door sedans (11%), station wagons (7%), and hatchbacks (2%).
- Financial leases are the overwhelming (90% of respondents) choice when it comes to type of contract. Only 7% and 3% opt for net leases and maintenance leases, respectively.

How 1984 fleet car purchases shape up



The fourth quarter: a vendor view*



* 4th qtr. 1983 vs. 4th qtr. 1982 for all manufacturers

Source: Dun & Bradstreet

Business expectations

The nation's top business executives remain bullish on America. That's what some 1442 managers recently told Dun & Bradstreet survey takers.

Some 72% of those queried, for example, note orders moving up over the last three months of the year (compared to a year earlier)—with only a miniscule 4% actually expecting a decline.

Prices

Equally encouraging is their view on prices. While 41% see increases relative to a year earlier, this figure isn't all that large given the extent of the business pickup. More significant, for instance, is the fact that 56% anticipate "no change" with an additional 3% expecting a decline.

Inventories

These top-line executives also confirm projections of a slow inventory turnaround. Specifically, some 43% now plan on fourth quarter gains—versus another 43% seeing no change and 14% planning on further cutbacks.

It's all summed up in the D & B "optimism" index (the percent expecting sales to increase minus those expecting a decrease). The latest reading here is 72—the highest level since 1979.

CURRENT PRICES

Slight dip in recent averages

There's more good news on the producer price front. September industrial averages, for example, actually slipped fractionally under month-earlier levels. As these prices normally rise after the summer lull, this decrease has to be regarded as strong proof that inflationary fires are still pretty much in check.

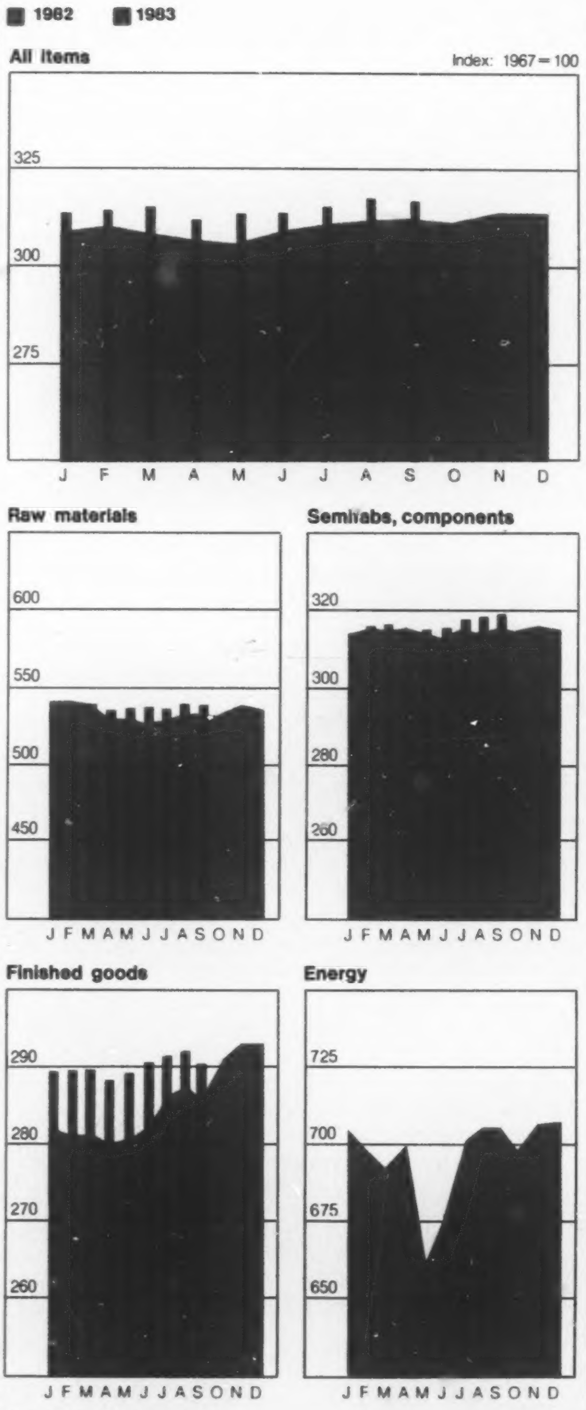
Offsetting trends
As in the past few months, the good showing can be traced to offsetting trends. On the energy front, increases in home heating oil, residual oil, and natural gas were balanced out by declines in gasoline and liquid petroleum gas.

And a similar situaiton is noted in chemicals. Some organics have edged higher, but others remain quite soft. In the inorganic area, stronger chlorine was blunted by further easiness in caustic soda.

Capital equipment
Capital equipment also suggests plenty of bargaining leverage for buyers. While service industry machinery moved up, declines were noted for machine tools, mining machinery, and heavy trucks. More significant, the overall capital goods price index

This month's breakdown

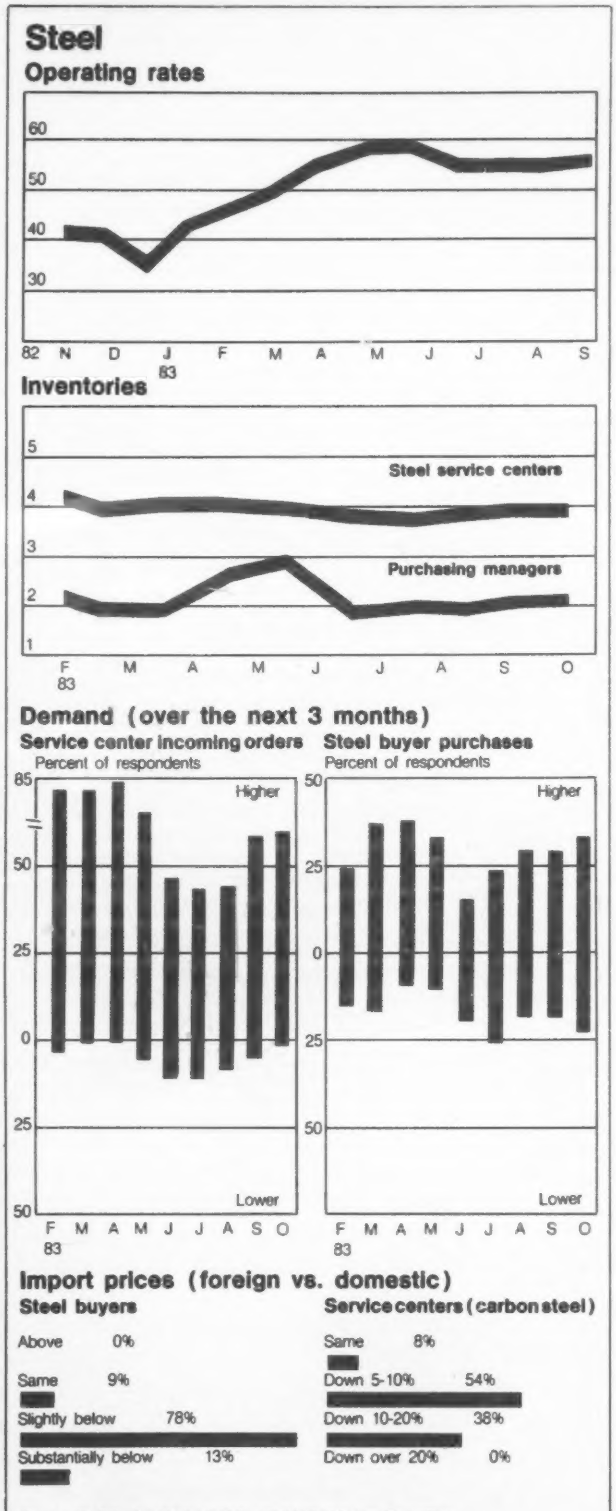
	Latest level (Sept)	% change from: Month ago	Year ago
Bearings	332.2	0.4	-0.9
Bolts, nuts, etc.	266.6	-0.6	-6.6
Chemicals, inorganic	290.9	-0.6	-6.6
Chemicals, organic	373.2	-0.6	2.9
Concrete products	302.8	0.2	1.4
Corrugated cartons	243.7	0.5	1.5
Cutting tools, small	278.4	0.0	0.7
Electrical instruments	274.8	0.0	9.8
Electric lamps (bulbs)	326.7	4.2	12.7
Electronic components	185.4	0.1	5.6
Fans and blowers	337.1	0.0	0.1
Foundry and forge products	350.7	-0.0	1.8
Fuel oil (residual)	1174.9	2.0	4.8
Furniture, commercial	248.72	0.2	3.4
Gasoline	620.6	-0.9	-9.4
Glass, flat	229.6	0.0	3.8
Glass containers	351.2	0.0	-2.1
Gypsum products	295.7	2.2	16.5
Hand tools	345.4	0.0	-0.3
Hand tools, power driven	220.4	-0.0	-1.0
Industrial furnaces	362.7	0.1	2.1
Integrating and measuring instruments	223.6	-0.0	5.5
Internal combustion engines	340.2	0.4	1.3
Lubricating oil	776.0	0.0	-12.6
Lumber millwork	305.7	-0.6	9.4
Material handling equipment	285.3	0.1	-0.1
Metal containers	338.3	0.1	2.9
Metal mill shapes (nonferrous)	315.0	1.0	2.4
Metal tanks	305.2	-0.4	-2.2
Motors and generators	334.0	0.1	7.3
Motor trucks (10,000 lb and under)	301.2	-4.0	4.1
Office and store equipment	154.7	0.0	1.4
Paperboard	252.8	1.0	0.8
Paper boxes and shipping containers	248.5	0.2	0.0
Paper office supplies	226.8	0.0	0.4
Paint	264.5	-0.5	-0.1
Plastic resins	293.1	-0.3	4.1
Precision measuring tools	245.5	0.0	2.3
Pumps and compressors	345.8	0.1	-0.7
Refractories	340.7	0.2	0.0
Rubber belts and belting	329.5	0.3	2.9
Scales and balances	228.3	-0.1	0.6
Steel products	354.4	1.7	2.3
Switchgear	269.9	0.1	2.3
Textiles, synthetic fibers	158.6	0.1	-2.4
Textiles, gray fabrics	147.1	0.3	2.4
Tires and tubes	242.5	0.0	-5.1
Transformers and power regulators	224.6	0.5	2.1
Welding equipment	273.0	0.1	-2.0
Wire and cable	203.8	-0.3	2.0



Industrial prices at a glance

Source: Bureau of Labor Statistics

BUSINESS DATATRAK



Source: Steel Service Center Institute, NAPM Steel Buyers Committee

eased a bit.

And even construction materials—despite a booming housing market—have been held in check. Cement, asphalt roofing, and gypsum boosts were offset by some rather sizeable declines in lumber and plywood.

Auto prices, too, were clocked in at a lower level in September. Labor Department spokesmen say that this reading is basically a one-shot affair—reflecting end-of-1983 model clearances. Citing recently posted boosts on new 1984's, they expect the auto index to be up about 2% over the fourth quarter.

STEEL SURVEY

Higher demand is expected

Fourth-quarter steel demand should be up fairly significantly, according to service centers and buyers. On the latter front, some 32% of buyers responding to a new NAPM survey expect to increase their receipts of the metal during the next few months—substantially above the 23% who feel they may reduce their overall intake.

Service centers
Distributors are even more bullish on this score. Some 59% responding to the latest Steel Service Center Institute (SSCI) survey look for an increase in their incoming orders in the next few months—with the biggest improvement anticipated in the Great Lakes and Rocky Mountain areas. In sharp contrast, only 2% see declining business.

The upbeat distributor outlook is also confirmed by SSCI president Andrew Sharkey who notes that overall shipments so far this year are running better than 9% ahead of the 1982 pace. He adds that the big thrust is coming from the auto, appliance, and information processing markets.

Price cuts
Despite the service center demand improvement, price cutting remains quite severe. Sharkey, for example, describes the market as being "highly competitive with industry profits still not commensurate with the improved shipping levels."

A few distributors single out stainless as being particularly vulnerable—noting that stainless tubing yields a margin of less than 2% over costs. Galvanized sheet, on the other hand, has improved a bit according to other industry spokesmen.

Imports
But the latter seems to be one of the few exceptions—with price pressures forcing some distributors to put increasing emphasis on cheaper imports.

Preston M. Green, president of the Association of Steel Distributors (another trade group) observes that his own company has had to increase purchases of foreign steel from "almost zero" to 20% this year to remain competitive.

The lower price of foreign steel is also confirmed by the SSCI survey. Some 38% of the respondents say they're getting price breaks of 10-20% on carbon steel imports. An almost-as-large 25% report the same kind of saving on incoming stainless.

Steel buyers also report continuing good overseas bargains—with 13% noting that these tags are "substantially below" comparable domestic levels. That's a bit above the 10-11% readings of the previous two months.

Nor are these purchases likely to diminish in the months ahead. Some 12% of the service centers, for instance, expect to increase their dependence on imports over the next six months—four times as many as the small 3% who expect to reduce their overseas purchases.

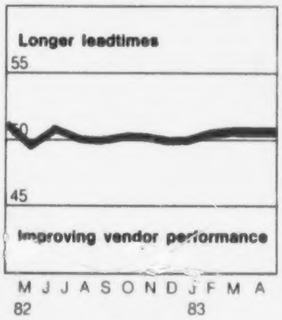
Inventories
These same steel surveys also suggest that inventories are probably as low as they're going to go. Respondents still talk in terms of further reductions. But this seems to be little more than wishful thinking. The facts are that both distributor and buyer stock levels (measured in terms of months' supply) have been virtually unchanged since the beginning of the year.

One possible reason for the end of inventory paring—and from increased activity: Some respondents are becoming somewhat concerned about spotty tightness in the months ahead. A few steel buyers, for example, already have singled out some grades of c-r sheet, electrical sheet, and stainless as areas that will bear close watching.

Monthly procurement status report

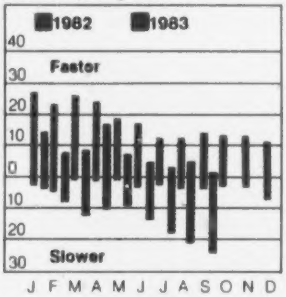
Leadtime index

A 'diffusion' index based on 158 key commodities. Above '50' indicates a tendency for leadtimes to stretch out. Below '50' suggests improving vendor performance.

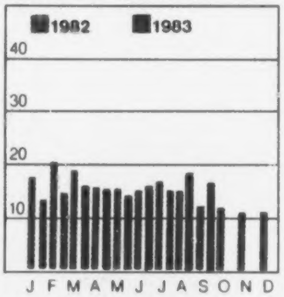


Delivery performance

Percent reporting deliveries

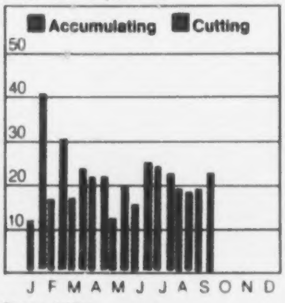


Forward commitments



Inventory strategy

Percent of respondents



Source: NAPM

PROCUREMENT STATUS

Moderate leadtime stretchouts

The slow, steady rise in leadtimes continues—as seasonal demand improvement is added to the general business recovery.

By and large, however, stretchouts have been quite moderate—except in the case of IC's and some other electronic components. ***Purchasing World's*** exclusive leadtimes continue to be clocked in at 51 (just above the neutral 50 level).

This reassuring trend is confirmed by ***PW's*** item-by-item rundown—where (1) leadtime declines (though less numerous than a few months ago) are still helping to at least partially offset products that are now moving out, and (2) more than half of the 150 or so items monitored on a regular basis remain unchanged from six months earlier.

Still other comforting signs come from:

- **The latest NAPM Business Survey Committee report:** Figures show few buyers are really worried with (1) those cutting and adding to inventories just about balancing each other out and (2) forward commitments holding pretty steady.
- **Rising industrial employment:** This would seem to suggest that vendors—after sitting on the sidelines for months—waiting to see if the business recovery was for real—are finally beginning to reactivate idled facilities.
- **Ample capacity:** The average factory is still operating at close to 10% under preferred levels. If projections for more moderate growth over the next few quarters (4% at annual rate versus 8% in the second quarter) are correct, few major bottlenecks are likely to crop up.

Upshot: Given all of the above factors, a good case can be made for stabilization in leadtimes by year-end or early 1984—only moderately above the super-fast delivery levels of late last year. ***PW***

Leadtimes and availability

Chicago: Some small increases in electrical materials such as wire, conduit, boxes, conductors, and switches (to 2 weeks). Also on the upside are selected electronic components, polyethylene bags (6-8), film laminations (12), h-r steel sheets (2-3), steel plates (2-4), brass sheet (8), brass tube (8-10), and plywood (2-3).

Cleveland: Aluminum is out a bit with one supplier booked through the first quarter. Some spotty tightness in stainless and carbon steel, too. Coil coating paint is also out fractionally (to 4-5 weeks). But unchanged are 2-ply fiber drums (2), corrugated (3), folding boxes, and (4) polyethylene and PVC resins (2-3).

Los Angeles: Somewhat longer weekly leads for galvanized steel (6-8), copper fittings (6-7), pumps (6-8), stainless (8-10), silbrazed fittings (17-21), and printed circuit boards (14). But coming in are grey iron castings (6-8), brass castings (6-8), insulation material (6-8), paint (3-5), and cushion seals and gaskets (6).

BUSINESS DATATRAK

Houston: Extending out to these new monthly waits are reciprocal compressors (8-12), and field-fabricated presure vessels (7-14). But coming in (also in months) are pumps (8-10), high-pressure heat exchangers (4-6), alloy and carbon steel heat exchanges (3-6), shop-fabricated steel pipe (4-6), and steam turbines (10-14).

Philadelphia: Some increased weekly waits in steel—7-8 for stainless bar, 3-4 for carbon round coil, stock-to-18 for carbon bar from minimills, and structurals (4-13). But little change in aluminum—12 for sheet and plate and 6-8 for bar, extrusions, and tubing. Also unchanged are standard fasteners and valves (both 5-8).

Pittsburgh: Minor extensions to these new weekly levels: corrugated boxes (3-4), corrugated rolls (2-3), and laminating papers (6-9). But chipboard is in fractionally (to 3-4). Other typical (unchanged) leads: maintenance paint (5), polyethylene and PVC resins (4), most alloying material (2), and mill quantities of copper fabricated products (6).

Leadtimes (in weeks)

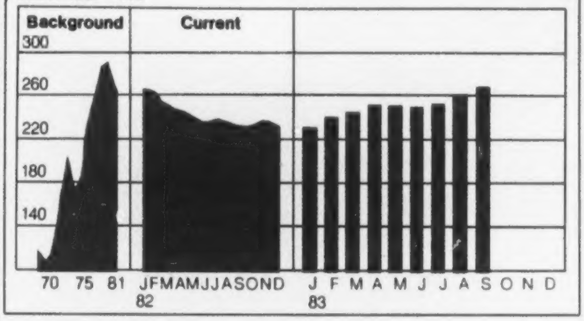
	Now	Month ago	Six months ago
STEEL			
Sheet (Phil)	7	7	5
C-R Sheet (Chgo)	10	10	13
Plate (Phil)	6	4½	4½
Plate (Chgo)	3	2½	2
Reinforced (Hous)	6	6	6
H-R Bars (Phil)	4½	4½	5
H-R Bars (Chgo)	2½	2½	2
Cold-Drawn Bars (Phil)	4½	4½	6
Galvanized (LA)	7	5½	4
Galvanized (Chgo)	7	7	9
Structurals (Chgo)	2½	2½	2
Structurals (Hous)	17	17	17
Tubing (Phil)	6	6	19
Grey Iron Castings(LA)	7	8½	9
Steel Castings (Hous)	11½	11½	11½
Forgings (Hous)	7	7	7
Pipe, Carbon (Hous)	13	13	20
ELECTRIC & ELECTRONIC			
Cables (Chgo)	8½	8½	8½
Capacitors (Chgo)	13	13	13
Circuit Breakers (Chgo)	6	6	6
Electromech. Devices (LA)	8	8	8
ICs (Linear) (Phil)	11	11	11
Motors (Phil)	21	21	21
Motors, 1000 hp & Up (Hous)	39	39	39
Printed Circuit Boards (Chgo)	7	7	7
Relays (Chgo)	15	15	15
Resistors (Chgo)	10	10	10
Resistors, Wirebound (Phil)	10	10	10
Transformers (Chgo)	10	10	10
LUMBER			
Hardwood (Pgh)	3	3	3
Hardwood (Clev)	3½	3½	3½
Plywood (Chgo)	2½	2	2
Plywood (Phil)	1½	1½	1½
Softwood (Clev)	3	3	3
Softwood (Phil)	1/5	1/5	1/5
Softwood (Pgh)	3	3	3
Particleboard (Phil)	2½	2½	2½
CHEMICALS-PLASTICS			
Adhesives (LA)	½	½	½
Naphthalene (Chgo)	2	2	2
Paint (LA)	5	4	4½
Paint, Coil Coating (Pgh)	4	4	3
Paint, Maint. (Clev)	2	2	2
Polyester Resin (LA)	2	2	2
Polyethylene Resin (Clev)	2½	2½	2
Polyethylene Resin (Pgh)	4	4	4
PVC Resin (Chgo)	2½	2	1
PVC Resin (Pgh)	4	4	4
Titanium Dioxide (LA)	1	1	1
PACKAGING			
Bags, Kraft (Pgh)	5	5	4
Bags, Multiwall (Clev)	9	9	9
Bags, Multiwall (Pgh)	6	6	6
Cartons, Corrugated (Clev)	3	3	3
Cartons, Corrugated (Hous)	3	3	3
Cartons, Folding (Phil)	6½	6½	6½
Cartons, Folding (Pgh)	3½	3½	4½
Cellophane Wrap (Phil)	5	5	5
Plastic Bags (Pgh)	3½	3½	3½
Plastic Pkg. (Pgh)	3	3	3
Shrink Film (Chgo)	4	4	4
Shrink Film (Clev)	3	3	3
Drums, Fiber (Pgh)	1	1	1
Drums, Steel, Std. (Pgh)	1	1	1
Wood Pallets (Chgo)	2½	2½	2½
Wirebound Boxes (Pgh)	4½	4½	4½
Strapping (Clev)	2½	2½	2½
Strapping (Pgh)	3	3	3
PAPER			
Fiberboard (Clev)	3½	3½	3½
Glassine (Clev)	4½	4½	4½
Glassine (Pgh)	5½	5½	5½
Groundwood (Clev)	4½	4½	4½
Groundwood (Pgh)	7	7	7
Kraft (Clev)	1	1	1
Kraft, Bleached (Clev)	1	1	1
Kraft, Bleached (Pgh)	5	5	5
Kraft, Natural MFNS (Clev)	1	1	1
Laminated (Clev)	8	8	8
Tissue (Pgh)	5½	5½	5½
NON-FERROUS			
Aluminum Coil (Chgo)	11	11	9
Aluminum Plate (Chgo)	9	9	9
Aluminum Sheet (LA)	4½	4½	6½
Aluminum Sheet (Chgo)	14	14	9
Brass Castings (LA)	7	8½	7½
Brass Rods (Chgo)	3½	3½	4
Brass Sheet (Chgo)	8	6½	4
Brass Tube (Chgo)	9	6½	5
Copper Fittings (LA)	6½	5½	5½
Copper Mill Prod. (Pgh)	6	6	6
Copper Tube (LA)	6½	6½	6
Copper Tube (Phil)	6	6	6
Lead (Pgh)	2	2	2
Magnesium (Pgh)	2	2	2
Manganese (Clev)	1	1	1
Nickel (Clev)	1	1	1
Nickel (Pgh)	2	2	2
Silicon (Clev)	1	1	1
Tin (Pgh)	3	3	3
Wire, Specialty (LA)	5	5	5
Zinc (Pgh)	2	2	2
MISCELLANEOUS			
Bearings, Domestic (Phil)	12	12	12
Bearings, Foreign (Phil)	26	26	26
Boilers & Furnaces (Hous)	35	35	35
Compressors, Centrifugal (Hous)	52	52	52
Compressors, Reciproc. (Hous)	39	39	39
Fasteners (Chgo)	½	½	½
Fasteners (LA)	4	4	4
Fasteners, Std. (Phil)	2	2	3½
Heat Exchangers, Carbon-alloy Steel (Hous)	20	20	30
Heat Exchangers, Hi-pressure (Hous)	21	21	43
Insulation Mat'l. (LA)	7	8½	8
Machined Parts (Hous)	9	9	9
Pipes & Valves (Chgo)	1½	1½	1
Pumps (Hous)	39	41	41
Pumps (LA)	7	4½	9
Rubber, Synthetic (LA)	2	2	2
Rubber Hose (LA)	4	6	5
Tungsten Carbide Parts (Hous)	15	15	15
Valves, Cast Steel (Hous)	8	8	8
Welding Supplies (Hous)	5	5	5

BUSINESS DATATRAK

Raw material price barometer

Latest month	**267.9**
Month before	**265.2**
Year ago	**239.0**

Index: 1967 = 100



Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	347.00	347.00	347.00
Steel, structural shapes, Pitts., cwt.	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt.	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt.	24.40	24.40	24.40
Steel, bars, dlvd. Phila., cwt., merchant quality	17.50	17.50	14.35
Steel, bars, Pitts, cwt.	17.50	17.50	14.35
Steel, bars, C.R., Pitts, cwt.	26.00	26.00	31.00
Steel, plates, Pitts., cwt.	25.75	25.75	24.25
Steel, plates, H.R., Pitts., cwt.	25.75	25.75	24.25
Steel, sheets, C.R., Detroit, cwt.	26.15	26.15	24.65
Steel, strip, C.R., Chi., cwt.	29.05	29.05	29.05
Steel, basic wire, Pitts., cwt.	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	0.755	0.762	0.450
Antimony, in alloy, lb.	2.00	2.00	2.00
Beryllium-copper, cost ingot, lb.	4.95	4.95	4.95
Brass, red, 85%, [sheet], lb.	1.23	1.27	1.15
Brass, yellow, [sheet], lb.	1.17	1.21	1.09
Cadmium, ton lots, lb.	1.25	1.25	1.00
Copper, electrolytic, wire bars, refd., lb.	0.73	0.77	0.72
Copper sheet, over 24 in., lb.	1.32	1.36	1.24
Lead, common, N.Y., lb.	0.20	0.20	0.26
Magnesium, pig ingot, [99.8%], lb.	1.38	1.38	1.34
Mercury, 20 fl. lots, N.Y., fl.	317.00	288.00	370.00
Molybdenum Climax Oxide/bags, lb.	4.65	4.65	5.85
Nickel, electrolytic, producer, lb.	3.20	3.20	3.20
Platinum, producer, oz.	475.00	475.00	475.00
Silver, N.Y., oz.	10.43	12.20	8.21
Tin, Straights, N.Y., lb.	6.41	6.43	6.23
Zinc, Prime West, East St. Louis, lb.	0.46	0.46	0.42
Zinc, die casting alloy, No. 3, lb.	0.525	0.525	0.455
PAPER			
Uncoated book 13 offset, ton	730.00	680.00	800.00
Watermarked bond, ton	845.00	845.00	845.00
Gummed sealing tape, carton	15.50	15.50	15.70
Boxboard, mach. clay ctd. recycled sheets 80 bright, .016, ton	475.00	475.00	475.00
Wrapping paper, std. distribution cost, kraft, basis wt. 50 lb., roll	28.00	28.00	28.00
Kraft linerboard, 42 lb., unbleached, ton	290.00	290.00	270.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd.	0.284	0.262	0.257
Cotton drill, 1.85, 59", 68x49, N.Y., yd.	1.00	1.00	0.97
Cotton middling, 1", N.Y., lb.	0.712	0.372	0.579
Printcloth, 48", 80x80, N.Y., spot. yd.	0.74	0.66	0.56
Army duck, 37", 13 oz., yd.	1.63	1.63	1.00
Blended printcloth, 64", 78x54, yd.	0.74	0.72	0.64
20s combed yarns	2.10	1.78	1.72
Wool tops, N.Y., lb.	3.60	3.60	3.60
CHEMICALS			
Acrylonitrile, tanks, lb.	0.43	0.43	0.46
Ammonia, anhydrous, fertilizer, wholesale, tanks, ton	160.00	150.00	210.00
Benzene, petroleum, tanks, Houston, gal.	1.50	1.50	1.47
Caustic soda, 76% solid, drums, carlots, cwt.	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb.	0.58	0.58	0.66
Formaldehyde, USP, 37%, [12% to 15% meth.], tanks, lb.	0.106	0.106	0.101
Glycerine, synthetic, tanks, lb.	0.730	0.730	0.805
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	0.480	0.480	0.715
Naphthalene, crude, tanks, lb.	0.22	0.22	0.22
Phthalic anhydride, tanks, lb.	0.305	0.305	0.330
Polyethylene resin, low density liner film grade (market price), lb.	0.38	0.38	0.25
Polypropylene, homopolymer grade (market price), lb.	0.37	0.37	0.375
Polystyrene, general purpose grade (market price) lb.	0.37	0.37	0.38
Shellac, bone dry, N.Y., lb.	1.65	1.65	1.65
Soda ash, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	0.34	0.34	0.35
Sulphur, crude, ex-terminal, Tampa, Fla., lt.	132.50	132.50	135.00
Sulphuric acid, 66%, commercial, tanks, ton	56.35	56.35	93.69
Titanium dioxide, anatase, reg., carlots lb.	0.69	0.69	0.69
Xylene tanks, gal.	1.33	1.33	1.45
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	330.50	335.10	296.10
Lumber 2x2, pine, mbf, cl	322.90	345.10	271.97
Plywood, plyform, 3/4", msf, cl	546.70	561.40	557.50
Plywood, 5/8", msf, cl	357.15	363.25	343.39
Cement, bulk, ton, tl	61.79	61.80	62.07
Sand, ton, cl	5.96	5.95	5.88
Ready-mix concrete, 3,000 psi/cu. yd., 15 cu. yd.	45.73	45.73	45.88
Crushed stone, 1½", ton, cl	8.00	7.90	7.75
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.76	0.75	0.75
Gypsum sheathing, ½"x1"x8", msf. tl	171.46	169.30	156.32
Brick, common, per thousand, tl	172.05	171.95	177.15
Asphalt paving, AC-20	158.71	158.58	156.24
Concrete sewer pipe, 12", prem. joint, per foot, cl	6.66	6.69	6.55
FUELS			
Fuel oil, No. 6 or Bunker C, Gulf., bbl.	25.75	26.00	24.75
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	31.25	31.75	32.25
Gasoline, 91 oct., reg., Los Angeles, rack, gal.	0.758	0.970	0.952
Gasoline, 94 oct., reg., Chi., tank car, gal.	0.858	0.870	0.949
Heating oil, No. 2, Chi., bulk, gal.	0.828	0.848	0.951
Heating oil, No. 2, N.Y., bulk, gal.	0.848	0.868	0.977
Heavy fuel, PS 400, Los Angeles, rack, bbl.	26.25	25.25	25.35
Jet kerosene, gal.	0.803	0.830	0.990
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	0.490	0.490	0.460
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	82.00	83.00	55.00
Steel, No. 1, hvy., dlvd., Chi., ton	77.00	77.00	47.00
Copper, No. 1, East, wholesale buy, dlvd., lb.	0.655	0.685	0.525
Copper, No. 2, East, wholesale buy, dlvd., lb.	0.535	0.598	0.455
Brass, red, East, wholesale buy, dlvd., lb.	0.585	0.645	0.485
Brass, yellow, East, wholesale buy, dlvd., lb.	0.360	0.360	0.315
Alum., old sheet/cast, E., wholesale buy, dlvd., lb.	0.475	0.490	0.240
Alum., mixed clip., E., wholesale buy, dlvd., lb.	0.495	0.510	0.250
Zinc, old, East, wholesale buy, dlvd., lb.	0.145	0.145	0.095
Lead, clean solids, East, wholesale buy, dlvd., lb.	0.140	0.115	0.150
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	28.00	28.00	5.00
Paper, old corrug. box, dlr., N.Y., ton	22.00	20.00	4.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb.	0.100	0.100	0.130
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb.	0.33	0.34	0.34

[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]

Profile of the purchasing professional —1983

Who manages the business of buying in American industry?

Well-educated, experienced, decision-makers who have wide-ranging responsibilities and authority.

That's the profile that emerges from ***Purchasing World's*** latest study of the world of the purchasing professional. The data that fill in the picture come from more than 1300 ***PW*** readers selected at random. The findings show that the typical ***PW*** reader:

- Spends more than $62 million a year for equipment, supplies, and services. One quarter of the respondents spend, on the average, close to $200 million annually.
- Has a dozen decision-making responsibilities from selection and evaluation of suppliers (99%) through control of inventories (81%) to specification of mode or carrier for outbound shipments. (More than four out of five specify mode or carrier for inbound shipments).
- Has authority to change buying decisions made by other functions (95%).
- Is a member of companywide committees—most often those concerned with cost reduction (75%), standardization (45%), and product design (28%).
- Has about a dozen years experience in the purchasing function. About half have been in purchasing for more than 10 years, 51% for less than ten.
- Has not necessarily spent all his business career in purchasing. Other work cited by respondents included that in production (38%), inventory control (37%), management (31%), and sales and marketing (24%). Finance, engineering, traffic, material control, and quality control were also mentioned, in that order.
- Attended college (69%). Close to 10% of the respondents hold advanced degrees. The major field of study mentioned most often is business administration (60%). Fourteen percent majored in engineering, 12% in liberal arts.

Other study results

Purchasing World readers (87% of whom are males) have an average age of 44, and an average income of $34,000. Half are in the $25,000-$39,999 bracket, and 6% earn more than $60,000 a year.

A large majority (73%) make an average of seven trips a year to visit suppliers or potential suppliers.

Purchasing professionals work closely with other key functions, the study shows, primarily with production (82%) and top management (60%). Over half also work with finance, plant engineering, and design engineering. Slightly fewer also work with the sales/marketing and MIS/data processing functions.

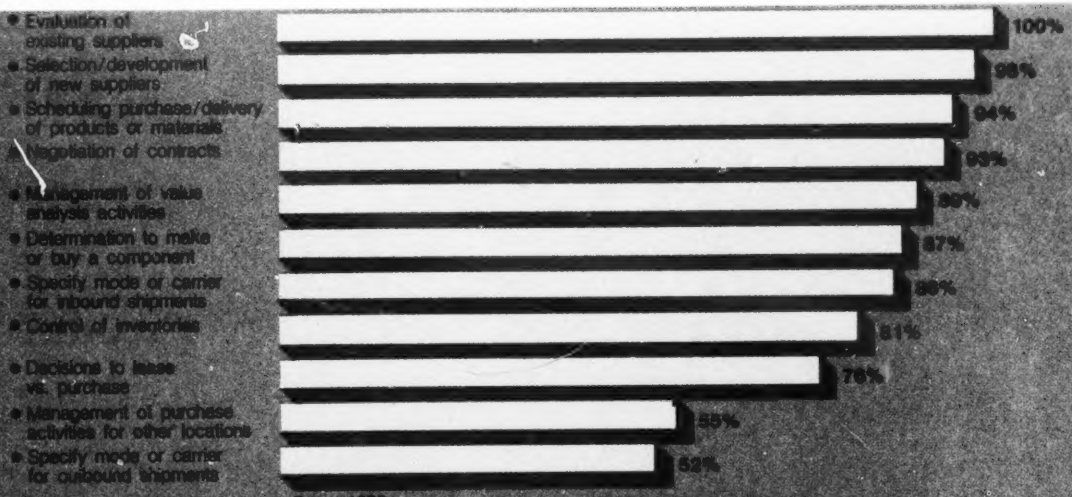
Seventy-one percent of the companies represented in the study have definite policies that require suppliers to clear through purchasing before contracting other departments.

Vendor performance in all its aspects comes through as purchasing's major concern today. Repeatedly, respondents referred to problems involving quality of purchased items, leadtimes, communication with suppliers, and vendor representatives' level of knowledge and technical expertise. Also frequently mentioned: cost reduction and closer control of inventory.

There have been changes in purchasing responsibility, status, experience, and pay since ***PW's*** last profile study (1981).

The average annual expenditure figure has jumped from about $42 million to $62 million, which can hardly be attributed only to inflation. The number of ***PW*** readers reporting directly to top management has gone from 50% to 55%. The decline in number of years worked in purchasing, from 16 to 12, [illegible] indicate an influx of college graduates or career-switchers from other departments, or both. The rise in average annual salary from $25,000 to $34,000 reflects the increased purchasing responsibility and authority revealed in the 1983 study. ***PW***

Purchasing department responsibilities



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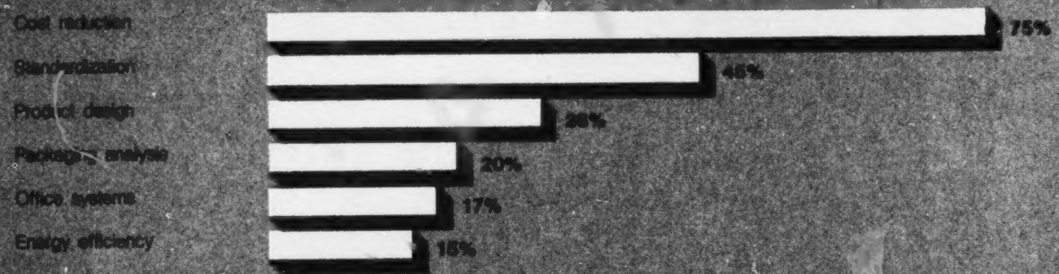
Committees where purchasing professionals are members



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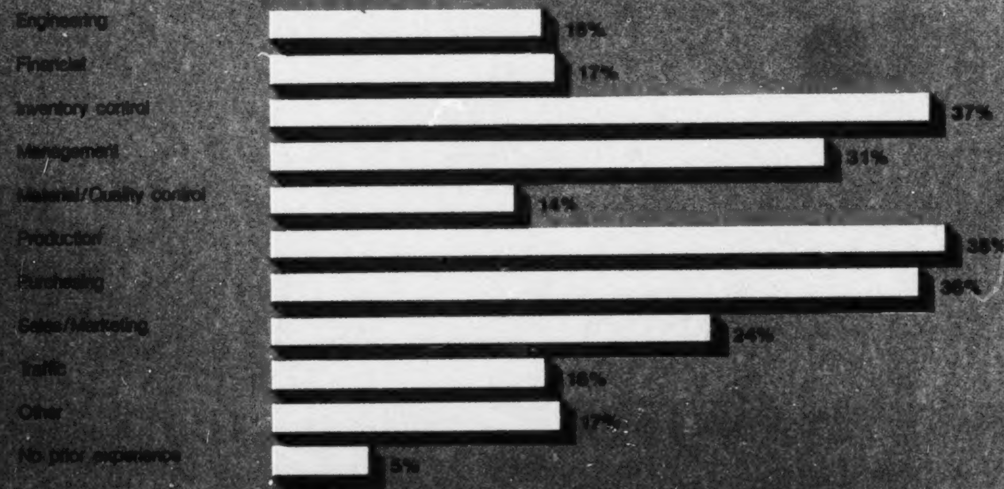
Work experience



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Source: Purchasing World

Expect heavy spending for pollution control and safety equipment

Continued heavy buying of environmentally-related equipment is in the cards—despite the Administraton's avowed aim to lighten the regulatory load on business.

This year, for example, purchases of nonproductive pollution control gear are targeted to reach the $9 billion level. Indeed, the only consolation here is that this will be about 5% under last year's total.

And the picture is much the same for OSHA-related activities. Some $5.2 billion will be earmarked for safety and health equipment this year. More significant, that's actually 16.4% ahead of last year's level and represents a double-digit increase even in real terms.

"These are areas we expect to be vitally concerned with for many years" is the way one machinery buyer puts it—adding that in his particular case these will be the only sectors where capital outlays will be up in 1983.

Other key findings on how things are shaping up in the environmental control area—all culled from a recent McGraw-Hill survey:

- The combined total of spending on pollution and OSHA equipment, $14.2 billion, is pretty much unchanged from other recent years (see chart). More important, it represents about 4.6% of all 1983 capital outlays)—actually a bit above the 4.4% figure noted for the past year.
- Subtantial industry-by-industry variation is anticipated. This year, for instance, the biggest bites out of the capital spending dollar, as far as pollution control is concerned, will be in nonferrous metals (11.3%), paper (8.7%), electric utilities (7.1%), chemicals (6.5%), and stone, clay, and glass (5.6%).
- Biggest percentages of the capital spending dollar traceable to OSHA purchases: textiles (5.6%), instruments (3.8%), chemicals (3.2%), steel (2.6%), rubber (2.4%), food (2.4%), and paper (2.1%).
- Hefty spending will continue over the subsequent three years (1984-86) when average annual outlays are estimated at $8.5 billion and $5.9 billion for pollution control and OSHA equipment, respectively. Together these suggest about a 4% chunk of the capital spending dollar.

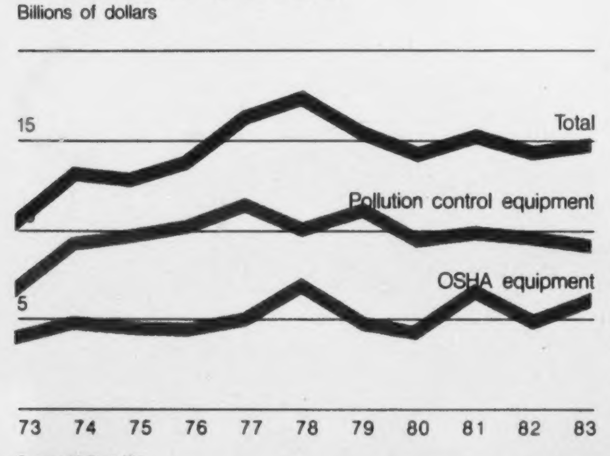
The decline from this year's 4.6% bite represents somewhat reduced emphasis on pollution control. In the words of the survey "industry is closing the gap between its environmental practices and those required by government regulation. Therefore, even if there's no relaxation in existing regulations, pollution control outlays would likely continue to decline in importance relative to total capital spending."

This year's projections on pollution control, incidentally, are pretty much confirmed by another survey (by the Commerce Department) which puts total equipment outlays here at $8.3 billion—not all that different from the McGraw-Hill $9.0 billion estimate.

Both studies also suggest that the biggest share of pollution control spending this year will be used to clean up our air. In the case of the private survey, the pertinent figures are 44% for air, 37% for water, and 19% for solid waste disposal.

On the other hand, a modest change in mix seems to be in the making. Thus the study suggests that, over the longer pull, a somewhat bigger percentage of the total will be spent on solid waste disposal and less on air and water clean-up gear. ***PW***

The high cost of environmental and personnel protection



Source: McGraw-Hill

Expected 1983 expenditures
(percent of capital spending dollars)

Industry	OSHA	Pollution	Total
Steel	2.6	5.7	8.3
Nonferrous metals	1.9	11.3	13.2
Elec. machinery	1.7	2.1	3.8
Nonelec. machinery	1.3	1.4	2.7
Automotive	0.4	0.8	1.2
Aerospace	0.9	2.3	3.2
Fabricated metals	1.7	2.3	4.0
Instruments	3.8	4.4	8.2
Stone, clay, glass	1.3	5.6	6.9
Chemicals	3.2	6.5	9.7
Paper	2.1	8.7	10.8
Rubber	2.4	3.1	5.5
Petroleum	1.3	4.2	5.5
Food & beverages	2.4	5.3	7.7
Textiles	5.6	5.5	11.1
Mining	1.5	3.3	4.8
Elec. utilities	1.6	7.1	8.7

Packaging buyers see stable market

Packaging won't be quite the bargain it's been over the past year or so. But by the same token, most price increases over the next 12 months are likely to be on the modest side—just about in line with the projected overall industrial inflation rate.

So say the vast majority of buyers responding to a nationwide survey by ***PurchasingWorld***. Behind their cautious optimism: A combination of factors—including continued ample or even more-than-ample supply, relatively moderate demand gains, and anticipated hard-nosed bargaining on the part of packaging PMs, who still see this as basically a buyers' market.

In the words of one East Coast purchasing executive, "We've still got plenty of bargaining leverage—and while we are tentatively scheduling a 5-6% increase in average packaging costs for the next four quarters, I'm still hopeful we can shave a percentage point or so from this estimate."

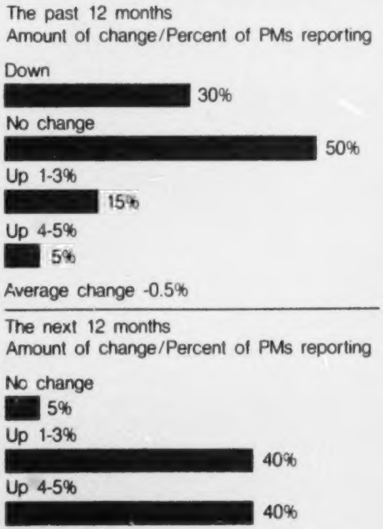
Survey findings

In any event, here's how he and his fellow buyers see the packaging scene unfolding:

- **Recent price performance:** Some four out of every five respondents say that over the past 12 months they have been able to hold tags at or below year-earlier levels. It's a conclusion that's confirmed by Uncle Sam's official price indexes which show fractional declines in average corrugated and glass container tabs vis a vis yearago readings—and virtually no meaningful change in metal cans.
- **Current discounting:** Almost all areas are noted. But by far the most frequent mention is given to corrugated, where better than one out of four say they have been able to negotiate some concessions off official list levels.
- **Prices over the next 12 months:** Every single respondent is reconciled to some acceleration. But, as noted earlier, the increases for the most part will be quite tolerable. Indeed, only about 15% see average prices moving up by more than 5%. Some of the typical ranges of increases suggested: corrugated, 3-7%; metal cans, 4-6%; and wood pallets, 3-4%. Buyers also see discounts somewhat harder to come by.

Confirmation of these basically liveable price increases is again available—this time from the big econometric forecasting firms which factor in all the major supply-demand-cost determinants. Wharton, for example, sees fourth-quarter 1984 prices running only these percentages above comparable year-earlier levels: paperboard containers (3½%), glass containers (4%), metal containers (5%), and wood containers (7%).

Packaging price trends



Source: *PurchasingWorld*

- **Demand and availability over the next 12 months:** The average increase in packaging use (in real, or physical, terms) is put at just around 5%—with virtually no concern about supplies (except for one or two respondents who felt leadtimes could stretch out a bit).

One interesting survey finding: the wide variation in the percent of overall product cost that goes for packaging. It ranges all the way from a low of only 0.3% to well over 10%—with consumer-type items generally running in the upper end of the range.

Buying tactics

But whatever the overall impact, packaging buyers seem determined to keep a lid on future price hikes. Aside from the usual comments about "hard-nosed bargaining," quite a few say they will continue to look at material substitution—with the accent on more use of plastics. One tells of the substitution of poly bags for folding boxes and another of a switch from metal to injection-molded plastic carrying cases.

Other hold-the-line ploys include redesign of packaging, cooperative purchasing, use of thinner gauge material, reuse of containers, and vendor participation in both value analysis and package redesign.

On the latter score, one PM says he is encouraging his suppliers to do the engineering work by awarding them as much as a year's business if they manage to come up with a cost-saving idea.

Another plans to play the competitive angle to the hilt in corrugated. He adds that he has opened bidding to all potential carton sources—but will place his annual requirements with the one vendor that offers the best deal. ***PW***

PurchasingWorld

DEC/1983

PMs push for quality

QUALITY AUDIT

PurchasingWorld®

Vol. 27, No. 12 - December 1983

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Editorial Staff

Editorial Director
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Editor
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Negotiating
Louis DeRose

Editorial offices:
800 S. Northwest Highway
Barrington, Ill 60010
Phone: 312—381-5971

PW PREDICTS

Robert S. Reichard, executive editor

Productivity gains limit inflation

There's good news on the price front as strong productivity gains keep a firm lid on inflationary pressures. Efficiency gains at annual rate for the total private nonfarm economy over the first, second, and third quarters of the year (3.7%, 6.6%, and 5.0% , respectively) have been greater than in the initial stages of all but two of the seven previous postwar recoveries.

Equally significant, the increase over the past two quarters has actually exceeded hourly wage and fringe gains. Upshot: Unit labor costs have fallen for two consecutive quarters—the first time this has happened in over 20 years. In the manufacturing sector, the efficiency performance is even more impressive (8%, 9%, and 12% at annual rates over the first three quarters). This is one reason why overall industrial producer prices have risen less than 1% since the beginning of the year.

To be sure, fourth-quarter output-per-manhour gains (as they are often called) might not be quite as robust. Employers are now adding to their workforces, thereby spreading new output gains over a larger number of workers.

But that's not to say we're on the verge of any big, new increase in labor costs. Reason: Pay rates—the numerator of the unit labor cost ratio—continue to move up at a surprisingly modest pace. A new Labor Department report on major collective bargaining for the first nine months of 1983 suggests only a 1.7% increase over the first year of these contracts—and only 2.8% over the life of the pacts. That's the lowest nine-month average since 1968 when this data was first recorded.

Even if productivity gains do slow down, it will be some time before any appreciable increase in unit labor costs is noted. Indeed, as of now, it looks like close to a zero increase in these costs for the year. You'd have to go back to the great recession of 50 years ago to find this kind of trend.

Next year, however, unit labor costs will almost certainly advance as (1) labor unions regain a bit more of their bargaining leverage and (2) bringing less efficient plants and equipment into use makes productivity gains harder.

Even so, the prognosis is for moderate rather than any major increases in labor costs next year. If you assume a 2-3% increase in productivity and about a 6-7% increase in wage rates next year (both quite reasonable given the current business climate), you still end up with only a 4% boost in unit labor costs—remarkably low for the second year of a robust economic recovery.

And that's why so many forecasters are so optimistic about 1984 inflation—with almost all the projections falling in the 4-6% range.

Copper

Buyers are still calling the signals as producer prices continue to fall. And judging from top-heavy stocks (Comex and the LME alone hold over 800,000 tons), chances of any sustained nearterm rally are just about nil. Behind the softness: Continued all-out production by Third World producers and less-than-anticipated demand increases. That's not to say U.S. consumption won't be up 5-10% this year. But that's low relative to previous business recoveries—as demand for capital equipment (which accounts for two-thirds of the metal's use) continues

Energy

It looks like another good year for energy users in 1984—provided you "buy" the major assumption that oil prices will continue on their current stable path.

The accompanying table (reflecting the latest Department of Energy projections) tells the story. In a nutshell, it's a "no sweat" situation—except for natural gas, where another close-to-double-digit increase is currently anticipated.

Indeed, in the case of gasoline, prices could well slip a bit under current levels by next year at this time—brought on by a combination of increasing producer competition and improved overall miles-per-gallon performance.

Wholesale heating oil quotes, meantime, will essentially remain unchanged—though there could be a temporary blip over the next few months, reflecting the normal seasonal price runup. On the other hand, average tags should still be about 8 cents/gal under last winter's levels.

Electricity rates are also expected to remain in bounds—despite pressure from natural gas and coal (where about a 6% increase is anticipated). The average industrial rate, for example, is put near 7.64 cents/kwh by late next year—only about 7% above current readings.

Energy price trends over the next four quarters

	4th qtr '83	4th qtr '84	% change
Gasoline	$1.247/gal	$1.202/gal	-3.6
No. 2 htg oil (whls)	$0.837/gal	$0.838/gal	0
No. 6 residual oil	$27.82/bbl	$28.18/bbl	1.3
Jet fuel	$0.868/gal	$0.865/gal	-0.3
Coal (utilities)	$1.715/MBtu	$1.812/MBtu	5.7
Natural gas (utilities)	$6.648/Mcf	$7.265/Mcf	9.3
Natural gas (residential)	$3.921/Mbtu	$4.328/MBtu	10.4
Electricity (residential)	$0.0715/kwh	$0.0764/kwh	6.9

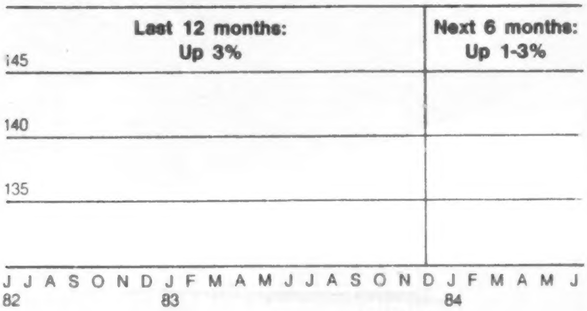
Source: Department of Energy

PW PREDICTS

TEXTILES

Textile mill products

Index: December 1975=100



CURRENT SITUATION: **Slow, steady improvement is now the order of the day. Increases are now becoming a bit more numerous**—with recent boosts hitting (1) acetate yarns, (2) some nylon specialty yarns, (3) army duck and osnaburgs, (4) some polyester filament yarns, and (5) lightweight grey goods. **The one big headache is imports**—with the combined apparel-textile trade deficit for 1983 put at near $9.5 billion—up a hefty 30% from last year.

DEMAND: **Overall industry activity is showing some smart gains over extemely depressed 1982 levels.** Mill output, for example, has been rising 1-3% a month since spring—and unemployment rates have been halved over the past year or so. In any case , it's now expected that the industry will reattain is pre-recession production levels by sometime next year. **Industry analysts are now looking for a 6% gain in 1984.**

SUPPLY: **Industry operting rates have spurted**—rising some 15 full percentage points since the beginning of the year (to near 90%). Nevertheless, there's little danger of any real tightness developing—as importers remain ready and able to jump into the breach. And judging from the outcrys of U.S. producers, **another big import gain could be in the offing come 1984**—despite dumping charges and recently concluded quota agreements.

PRICE OUTLOOK: **The influx of low-priced imports should continue to limit price advances. Ditto, relatively restrained labor cost hikes.** That's not to say, of course, that some prices won't show some fair-sized advances. But by and large, increases will be moderate—with overall textile mill product increase expected to be **up only 1-3% over the next six months—and about 4-6% for the year as a whole.**

to lag. True, prices will have to rise (U.S. breakeven points are in the 80-85 cents/lb range). But even 80 cents/lb may be an over-optimistic estimate for next summer.

Electronic parts

The new 256K RAM (now near $100/unit) could drop to under $20 within a year. Meantime, the current workhorse 64K chip continues to command good prices ($5-6/unit versus the $3 level of last year). Also look for substantial price increases in passive components in 1984—as demand outstrips supply and leadtimes stretch out. Candidates for big boosts here: wire-wound resistors, aluminum capacitors, mica capacitors, carbon comp resistors, and connectors.

Aluminum

Prices are taking a breather after the recent runup. True, some boosts are still being posted. But these are being offset by some easiness in merchant ingot and the failure of a recent 8% hike in alloy plate to hold. Behind the pause: (1) the need for use rs to digest earlier boosts and (2) some substantial increases in operating rates (up close to 20 percentage points to near 77% so far this year).

But even if prices have temporarily levelled off, the metal remains quite bullish—with a 6% boost in shipments expected next year on top of this year's big 12% increase. This, in turn, suggests further price boosts—with ingot rising into the 80s by n ext spring or summer.

Paper

Firming is now the order of the day almost everywhere. Some recent typical increases: Registered bond 15 lb (from $675/ton all the way up to $745/ton), uncoated book #3 offset (from $730/ton up to $760/ton), uncoated groundwood (from $535/ton up to $575/ton), and watermarked bond (from $845/ton up to $915/ton). Linerboard is also firm at the recently established $290/ton level—with further increases into the $325/ton range expected by mid-1984. But there's still some discounting in solid bleached board a s well as in grocery bags and sacks.

Paper prices ($/ton)

	3Q 1983	4Q 1983
Registered bond, 15 lb	$675	$745
Watermarked bond	$845	$915
Uncoated book #3 offset	$730	$760
Uncoated groundwood	$535	$575

Zinc

The plating and alloying metal remains fairly buoyant. Signs of the times: (1) recent increases in the U.S. producer price, (2) comparable boosts in die casting alloys, and (3) a 5% hike in the European producer prices.

And further advances can't be ruled out. Credit the firming to recent declines in producer stocks, tightness in SHG metal, and relatively strong demand (U.S. consumption could be up 11% this year and another 10% in 1984. This, in turn, is beginning to prompt some U.S. production boosts—notably the possible re-opening of Asarco's 107,000-ton per year Corpus Christi plant.

Alkalis

Weakness pervades—with both soda ash and caustic soda still on a downward price course. As for the former, a new $15/ton Temporary Voluntary Allowance has brought the FOB Wyoming price down to $69/ton. Reason: low operating rates, which this year have been averaging in the 73-74% range. Meantime, caustic soda, a coproduct of chlorine, has been cut another $70-80/ton on the East and Gulf Coasts. All in all, quotes have been halved in less than two years. True, improved aluminum activity will take some of the heat off caustic. But the price prognosis remains basically bearish because of increased European imports.

Construction costs

A new forecast by Turner Construction Co. suggests continued moderation, with costs rising about 1.2% a quarter into early next year. And at this point in time a 4.5-5.0% increase for 1984 as a whole looks like a pretty good bet. But there could be regional differences for both materials and labor—due to variations in productivity, efficiency, and competition. On the latter score, competition for work among both contractors and materials suppliers is expected to remain intense in many areas of the country for at least another 6-12 months.

PBXs

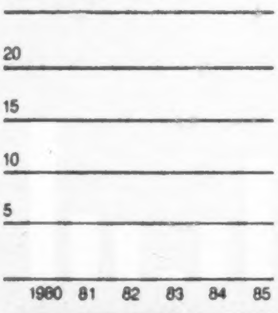
Count on new competition from regional Bell operating companies to put new downward pressure on prices next year. The older analog voice-only PBX lines are expected to be particularly weak.

Paint

Plan on some fair-sized price boosts. Reason: rising demand—as improving auto and building markets point to a 7% increase in 1984 consumption (on top of this year's similar boost). The resulting closing of the supply-demand gap should make for about a 7-9% increase in overall 1984 paint bills—in sharp contrast to the near-level rates of the past 12 months.

Paint prices

Percent increase
(Index: 1967 = 100)



Home computers

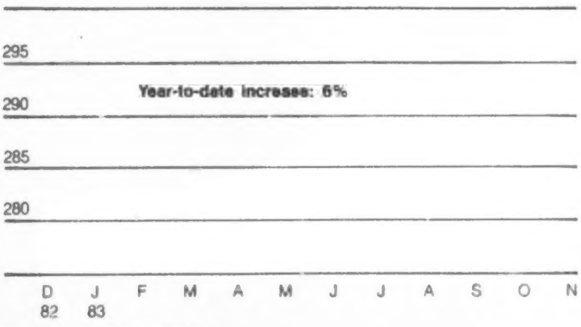
Good buys here as Texas Instrument drops prices for its discontinued 99/4A model to under $50. Software cartridges for the model are also available for as low as $10. Commodore, Atari, and Coleco say they won't compete—but look for some off-list pricing (especially in high-priced models)—as (1) an increasing number of different machines compete for the consumers' Christmas dollar, and (2) all producers battle orders for IBM's PCjr, which will sell for as low as $700.

Lead

Prices are a bit shaky—in part because LME quotes remain far under U.S. levels. But the prognosis remains fairly bullish near-term as (1) stocks edge lower, (2) modest tonnages move to the Eastern bloc,

Plastic resin prices

(Index: 1967 = 100)



Source: Bureau of Labor Statistics

Plastic resin quotes are staging a fairly strong recovery.

Official tags (as measured by the Labor Department producer price index) are up about 6% since the beginning of the year (see chart). But if you take into account some of today's reduced discounts, the rise in transaction prices in many instances is probably several percentage points higher than that.

Certainly, recent selective 4-5 cents/lb increases in polystyrene have held up well—reflecting, in large part, a big 6 cents/lb increase in the monomer. And both high- and low-density polyethylene are also up—with liner grade LDPE recently bumped 4 cents/lb. There haave been hikes in ABS, too, with appliance extrusion grades increased 6 cents/lb.

Polypropylene is another bullish area. A recent 2-3 cents/lb increase has pushed the general purpose homopolymer grade to well over 40 cents/lb. And further hikes could be in the offing here as operating rates rise into the 90% range by next year.

About the only weak areas have been polyvinyl chloride—where the past summer's 5 cents/lb boost has all but washed out. Behind the easiness here: cheap imports from both South America and Eastern Europe.

PW PREDICTS

STEEL

CURRENT SITUATION: Prices are beginning to firm. Flat rolled products are commanding a bit more and low-carbon rods sold by minimills have moved up $20/ton since the summer. **Shipments have also picked up.** Current (fourth quarter) levels, for example, are expected to approach 19 million tons—a considerable improvement over the 17 million shipped in the third quarter. **Also, user inventories in the fourth quarter are expected to show some fractional increase,** reversing the steady downtrend of recent quarters.

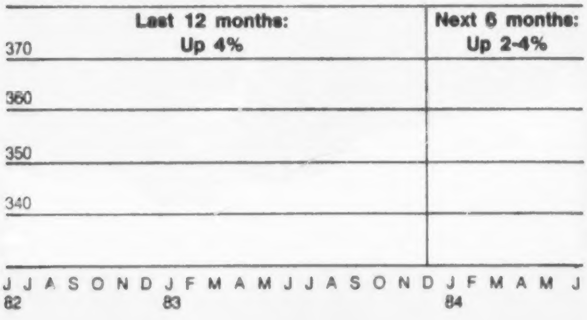
DEMAND: Next year's outlook is also beginning to look a bit better. If projections for continued GNP growth materialize (gains are now put in the 4%-plus range), **the industry could ship about 76-78 million tons**—a 13% jump over the anticipated 68 million that will be shipped this year. But consumption, reflecting some inventory buildup (on both user and mill levels), is expected to show only a 5-7% advance (to near 90 million tons).

SUPPLY: There still seems more than enough to go around—for now and for all of 1984. Indeed, given (1) the current 60% operating rate and (2) the demand projections, it's hard to make a case for any serious tightening. Then there are imports, which are expected to hit more than 16 million tons (about 19% of total U.S. consumption) next year.

PRICE OUTLOOK: Look for more attempts to shore up tags after the first of the year as demand continues to improve. But most of the increases will be in the form of smaller discounts. Upshot: ***PW***'s overall steel index (primarily based on lists) won't be up more than 2-4% by mid-1984. After that look for accelerated increases—**perhaps averaging 10-15% for the year.**

Steel mill products

Index: 1967 = 100



and (3) domestic battery demand remains brisk. The latter should push U.S. use up over 1.2 million tons this year (a 2.6% increase). But next year should see only a 1.0-1.5% rise. As for prices, look for maybe another 1-2 cents/lb boost by year-end—followed by a retreat in early 1984 as the battery buying season ends.

Turpentine

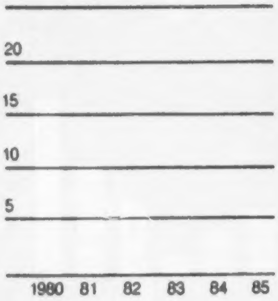
Prices of sulfate types are likely to remain soft in the 60-65 cents/gal range into early 1984—a far cry from the $1.90/gal quote which prevailed as recently as 1981. Reason: A high 6-week inventory—with the situation aggravated by the banning of chlorinated pesticides, which accounted for 16% of the total end-use market. The outlook for other markets is none too bright either. Indeed, since the beginning of the decade, overall demand has shrunk about 15-20%.

Metalworking machinery

Orders are beginning to pick up—suggesting that bargains will be harder to come by. Also indicative of a changing climate: a new capital equipment buying survey which calls for a 15% increase next year—in sharp contrast to this year's estimated 7% decline. In any event, expect discounts to slowly dry up and 1984 list levels (as measured by the Labor Department producer price index) to be up by 4-5%—with an even bigger 6-8% increase anticipated for the following year.

Metalworking machinery prices

Percent increase (Index: 1967 = 100)



Stainless steel

Producers are again attempting to shore up prices—with the latest move being a move to knock some 5-10% off bar discounts, which up until recently had been ranging as high as 30%. And in flat-rolled products (sheet, strip, and plate), mills are said to be planning on a 10% cut in discounts—something which (if it holds) could add as much as $200/ton onto the purchasing invoice.

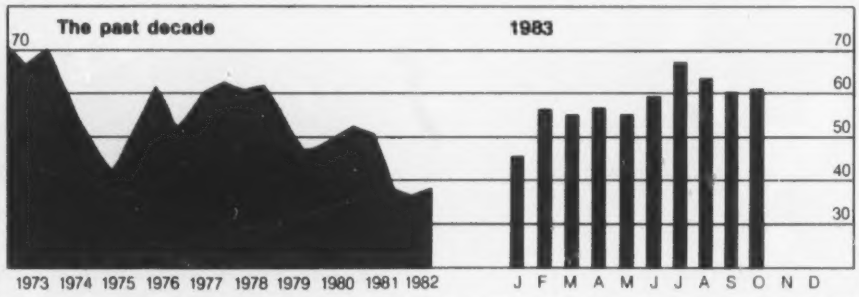
Sulphur

Markets are slowly beginning to firm. The gap between Frasch and recovered material, for example, has narrowed from $15 to $10/ton. As of latest report the current market price for recovered sulphur was $115/ton—with Frasch sales moving in the $120-125/t on range. Further strengthening is likely if 1984 forecasts calling for increased demand for phosphate fertilizers (a key end-use market) materialize. ***PW***

BUSINESS DATATRAK

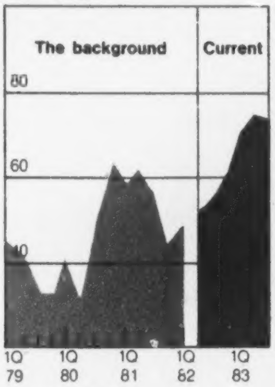
NAPM business barometer

Based on five indicators (employment, inventories, new orders, production, vendor performance)

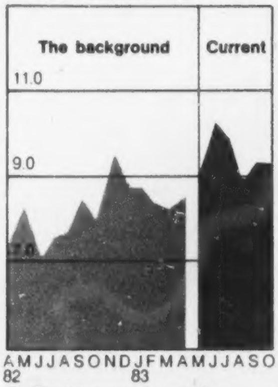


Leading indicators

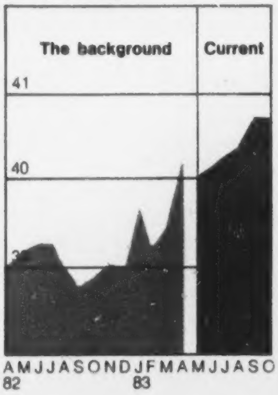
1. Business confidence
Index: 0-100



2. Auto sales
Millions of units, seas. adj.



3. Factory work week
Hours, seas. adj.



KEY ECONOMIC TRENDS

Indicators show more strong gains

The recovery, now almost a year old, is still going strong. All signs point to a significant gain in the last quarter. This upturn may not be as large as the near-8% annual rate of increase noted in the third quarter, however.

If there's any doubt about this bullish projection, take a look at the widely-monitored NAPM Business Barometer (chart above), a leading indicator of activity a few months down the pike. At latest report it is being clocked at 61.2, more than 11 points above the neutral 50 mark.

Then there are factory orders. They've been rising 1-2% a month since early summer, foreshadowing continued growth in production, employment, and sales.

Inventories
Factory inventories are yet another plus factor. The recent wave of inventory reductions seems to be over, and firms are beginning to replenish their stocks to keep up with increased orders and sales. If nothing else, this trend will add to production orders during the coming months.

One thing is certain: Business confidence (see top chart) remains high. The Conference Board's optimism index (based on a survey of 1500 executives) is now at 75, nearly matching the 76 peak of the previous quarter. (Scores are on a scale of 0-100.)

Equally significant is the optimistic rating assigned by these executives to current business conditions. This figure advanced from 76 to 83 during the latest 3-month period.

One factor behind this management cheer could be rapidly improving profits. In the most recent quarter, both earnings and margins rose substantially. On the latter score, after-tax profits per dollar of sales increased to 4.9%. This rate is not much lower than the 5% figures that prevailed through most of 1980 and 1981 before the bottom dropped out.

Capital spending
All of this improvement has prompted many outfits to move ahead with plans for stepped-up capital spending, even in the face of double-digit interest rates. A new McGraw-Hill survey, for example, suggests that plant and equipment outlays will be up 1 5% in 1984, a 22-percentage-point improvement from the 7% decline expected for the current year. Thus, another important segment of the economy finally seems to be jumping on the recovery bandwagon.

Then there's the continued consumer willingness to spend. Perhaps the best indication here is auto sales, which at latest report were running 30%

ahead of year-earlier rates. (See center chart.) Viewed from another perspective, the industry in the current quarter expects to sell 7.5 million domestic cars (at an annual rate), up from 7.0 million in the third quarter and only around 6 million during the first three months of the year.

Electronic components' larger role

Figure on electronic components playing a still more important role in the average U.S. purchase mix in the next 5-10 years, and that an increasing percentage of these space-age products will be coming from overseas sources.

The overall gain in demand (as shown in the chart) won't be quite as fantastic as in the past 10 years, when purchases rose at a 14% annual pace. But if projections by Predicasts (a Cleveland-based forecasting firm) are correct, growth will continue to outpace GNP by a wide margin.

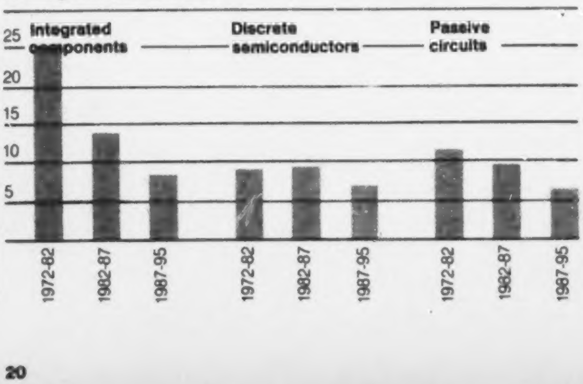
Some of the eye-opening projections:

- *Integrated circuits:* This key segment of the component market, which grew at a 23% annual rate during the past decade, will continue to show double-digit gains (14.2% through 1987). And while memory chips and microprocessors will remain the largest-volume items, the fastest growth will be in semicustom IC's (particularly gate arrays and standard cells, where a 40% annual growth rate is possible).
- *Discrete semiconductors:* Contrary to forecasts published a few years back, there's still plenty of growth potential here. The share of the overall market will shrink. But a 9% annual rate of increase for the next few years (led by optoelectronic devices) is still impressive.
- *Passive components:* These items, including resistors, capacitors, inductors, relays, etc., are projected to grow 9.6% a year through 1987 and 6.4% a year in the 1987-95 period. Piezoelectrics, which up to now have seen only military and industrial applications, are expected to be star performers.

Finally, a word on foreign competition. There will be plenty of overseas purchases from Singapore, Malaysia, Japan, Taiwan, and Western Europe. Four years from now, imports of electronic components could be topping exports by $5.5 billion a year. And the red-ink figure could soar to $10 billion by 1995.

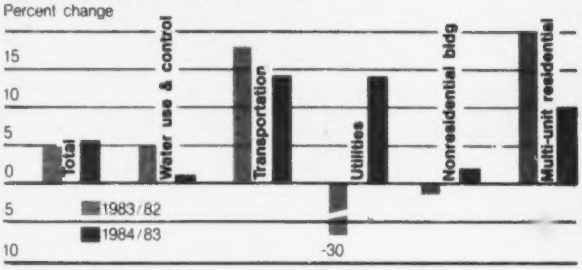
Slower growth for electronic components

Annual growth rate (percent)



Construction contract awards

Percent change



Construction outlook is mixed

It's beginning to look like a mixed year ahead for heavy construction and building (a sector which includes everything except new homes), and, thus, for most materials, component parts, fixtures, and equipment products that are needed to complete these big projects.

The overall averages suggest little change, with a new *Engineering News Record* forecast of contract awards suggesting an overall dollar increase of 6%. This rate shows little change from the 5% gain last year.

Between the averages hide some interesting cross trends (see chart). Transportation, a sector that consumes large tonnages of cement and steel, will sport an impressive advance. This trend reflects a continuing influx of federal funds.

And while nonresidential building will show only a 2% increase, one of the subgroups (manufacturing facilities) will jump sharply from a 48% decline this year to a 12% increase in 1984. Confirmation appears from a new plant and equipment survey that points to a big gain in capital spending next year.

CURRENT PRICES

Moderate increases reported

Price hikes, although they accelerated a bit during the past month, remain moderate and spotty. The overall gain in industrial tags is holding at 1.5% compared to year-earlier levels.

Major changes in the past month included a gain in energy costs after a recent lull. Higher averages are noted for electric power, jet fuel, residual oil, home heating oil, diesel fuel, LPG, and kerosene. The only exceptions were natural gas and kerosene, both of which edged a bit lower.

The chemical industry showed some modest firming. Higher averages were reported for both organic and inorganic formulations. Plastic resins jumped 1.5% in the past 30 days.

Also heading higher were textiles (including synthetic fibers and grey goods), corrugated containers, paper office supplies, selected equipment items (notably industrial furnaces, aircraft, and trucks), rubber hose, and many electronic components.

Construction

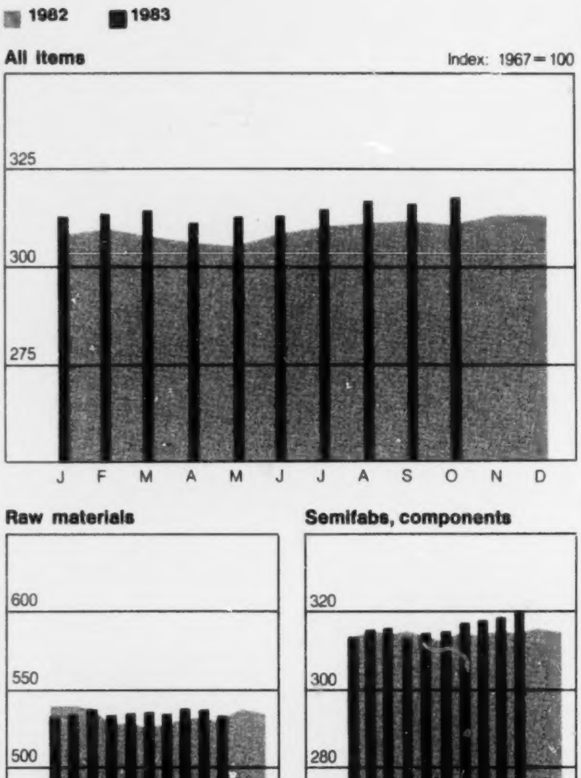
Construction edged somewhat higher. Hikes in lumber, plywood, gypsum, building paper, refractories, and plastic construction materials all helped boost the building material subgroup by about 0.5%.

The situation in metals

This month's breakdown

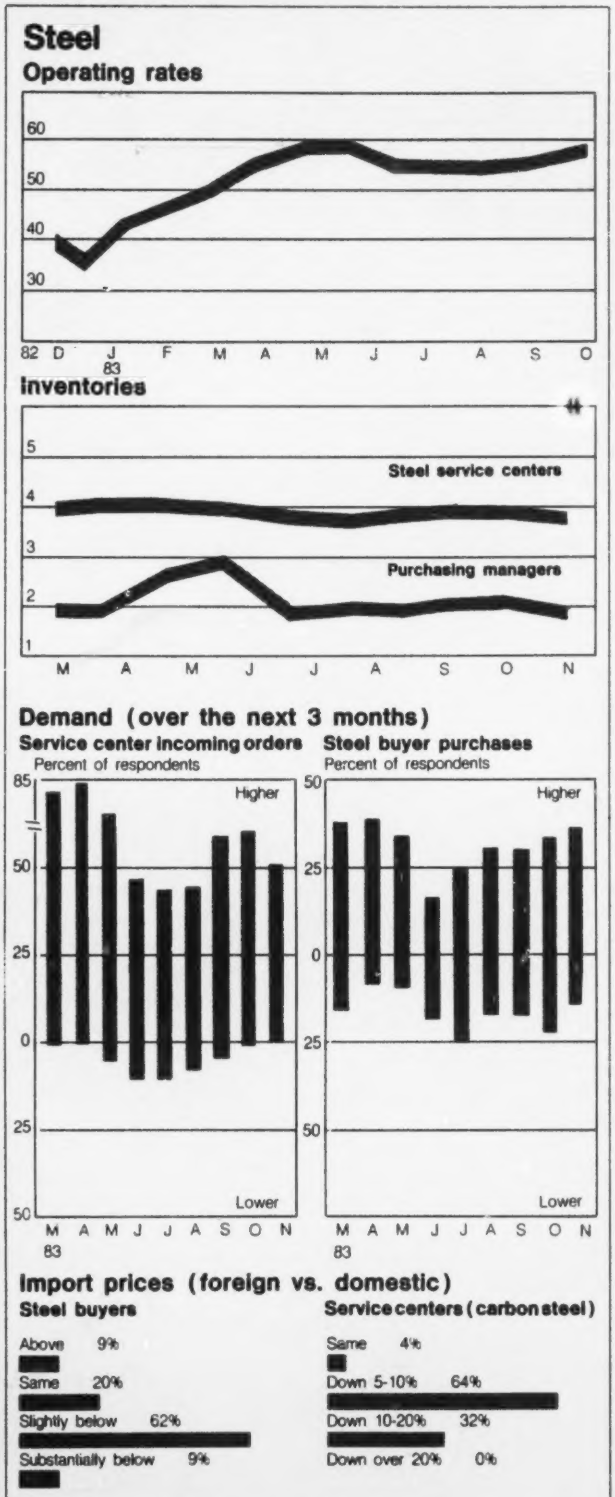
	Latest level (Oct)	% change from: Month ago	Year ago
Bearings	332.0	-0.1	-1.0
Bolts, nuts, etc.	266.8	0.1	-1.5
Chemicals, inorganic	292.4	0.5	-4.7
Chemicals, organic	375.9	0.7	3.2
Concrete products	303.3	0.2	1.6
Corrugated cartons	245.3	0.7	2.0
Cutting tools, small	278.5	0.0	0.7
Electrical instruments	274.8	0.0	9.8
Electric lamps (bulbs)	326.9	0.1	10.1
Electronic components	186.0	0.3	5.6
Fans and blowers	335.8	-0.4	-0.2
Foundry and forge products	352.5	0.5	1.7
Fuel oil (residual)	1193.1	1.5	5.7
Furniture, commercial	287.9	0.1	3.4
Gasoline	612.7	-1.3	-8.9
Glass, flat	229.5	0.0	3.8
Glass containers	351.1	0.0	-2.1
Gypsum products	304.3	2.9	19.3
Hand tools	346.1	0.2	-0.1
Hand tools, power driven	220.6	0.1	-0.9
Industrial furnaces	366.7	1.1	2.9
Integrating and measuring instruments	223.6	0.0	5.2
Internal combustion engines	340.9	0.2	1.3
Lubricating oil	776.0	0.0	-10.5
Lumber millwork	307.1	0.5	10.2
Material handling equipment	286.2	0.3	0.2
Metal containers	338.3	0.0	2.6
Metal mill shapes (nonferrous)	314.6	-0.1	3.5
Metal tanks	305.3	0.0	-2.3
Motors and generators	334.1	0.0	6.9
Motor trucks (10,000 lb and under)	282.8	10.8	3.2
Office and store equipment	155.2	0.3	1.9
Paperboard	255.5	1.1	3.0
Paper boxes and shipping containers	250.5	0.6	0.6
Paper office supplies	227.4	0.3	-0.3
Paint	264.1	-0.2	-0.2
Plastic resins	297.5	1.5	5.8
Precision measuring tools	244.2	-0.5	7.5
Pumps and compressors	345.1	-0.2	-0.9
Refractories	345.6	1.4	1.4
Rubber belts and belting	330.5	0.3	2.9
Scales and balances	232.4	1.8	2.1
Steel products	354.8	0.1	2.0
Switchgear	270.4	0.2	2.2
Textiles, synthetic fibers	160.4	1.1	-0.4
Textiles, gray fabrics	148.9	1.2	3.6
Tires and tubes	242.7	0.1	-5.1
Transformers and power regulators	224.2	-0.2	1.6
Welding equipment	273.2	0.1	-1.9
Wire and cable	202.6	-0.6	2.7

Industrial prices at a glance



Source: Bureau of Labor Statistics

BUSINESS DATATRAK



Source: Steel Service Center Institute, NAPM Steel Buyers Committee

was relatively mixed. While tin and lead tags moved higher, the impact was offset by softness in precious metals, copper, and nonferrous scrap. Steel discounting narrowed, although quotes remained far below book levels.

No general upturn

The fact that 15 of 50 items regularly monitored by ***PW*** (see table) remained in the negative column compared to month-earlier results is regarded as a solid anti-inflationary sign. As one government official put it, "I wouldn't start to worry about prices until a more broad-gauge upturn develops, and that still seems at least another six months away."

STEEL SCENE

Demand continues upward

New surveys of buyers and service centers back up the increasingly bullish steel outlook.

Thirty-three percent of steel buyers expect to increase their receipts of the metal during the next three months, nearly twice as many as the 17% who expect a decline. And that's modest compared to service centers, where 51% see an increase in orders for the next three months (and not one respondent predicted a decline).

The distributor situation is summed up by Andrew G. Sharkey, president of the Steel Service Center Institute (SSCI). He figures that association members could end up shipping 16.5 tons of metal, up some 15% from last year's 14.3 million tons.

Also adding to the service center demand is the continuing buyer trend toward more reliance on distributors to keep their own inventory costs down. Sharkey notes that half of all U.S. flat rolled steel inventories will be held by distributors next year .

It's a trend that's also beginning to show up in user inventory statistics. Totals here were down to only 9.5 million tons at latest report. That's less than half the 24 million in 1973, and a far greater reduction than noted in steel consumption for t he same period of time.

Inventories seem to be in pretty good shape relative to sales. Reported months' supply edged down for both buyers and service centers during the past month (see chart).

Leaner inventories

Judging from responses by both groups, stock levels will stay trim. On the buyer level, for instance, 22% speak of decreases in the fourth quarter of the year. Only 3% contemplate increases. This view could be a bit unrealistic in view of still-expanding durable goods production, although some of this may be an attempt to hold down inventories for end-of-the-year tax purposes.

Steel service center inventory intentions are more neutral. The number of centers projecting increases for the next three months is not much different from those expecting decreases. Actual figures here: increases 20%, declines 26%, and the remaining 5 4% planning to hold stocks at or near current levels.

Import picture

Meantime, import bargains are still generally available for those who are willing to shop around. Survey results tell the story: 62% of the buyers note small price breaks and another 9% dub the savings as quite substantial.

The same picture is painted by service centers. Roughly one-third of the distributors say they can get prices 10-20% under domestic levels on overseas purchases of both carbon and stainless steels.

Steel buyers say they plan to step up purchases of such bargains. Some 17% of users say they intend to be more dependent on foreign steel during the next six months. Only 6% say they'll be less dependent on foreign sources.

PROCUREMENT STATUS

Leadtimes beginning to stretch

A briskly growing economy is finally beginning to impact on leadtimes.

To be sure, the stretchout is quite modest and spotty, with the most serious problems centered in the booming electronics sector. But now for the first time, other product lines are also being affected—including aluminum, steel, and some coated offset paper.

PurchasingWorld's exclusive leadtime index sums it up. At 52 (two points above the neutral 50 mark), the figure is hardly alarming. Nevertheless, it does suggest that things aren't quite as easy as they were 3-6 months ago—at least not as far as overall averages are concerned.

All in all, about one quarter of the 150 items regularly monitored by ***PW*** are now sporting longer waits than last spring—although, again, the increases in most cases are quite modest.

The NAPM speed of delivery survey provides still further evidence of a modest tightening up. As of latest report, some 27% of responding buyers were noting slower deliveries—up from the 22% reading of late summer.

Most purchasing executives, however, aren't all that worried about these kinds of stretchouts, pointing out that the problem isn't so much lack of capacity as it is that suppliers have been caught short by the speed of the recovery. Their gut feeling is that next year, as vendors complete tooling up for a higher level of output and as growth slows down, things should begin to level off.

Their inventory strategy would certainly seem to indicate this kind of evaluation. As of now, there are still more PMs paring than adding to stocks—hardly the harbinger of any major concern or impending shift in purchasing policy.

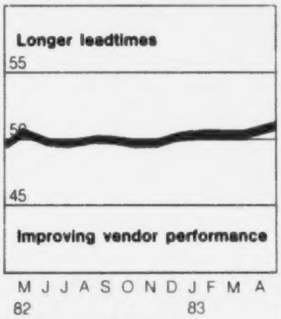
In the words of the NAPM Business Survey Committee, "PMs seem determined to operate with lower inventories, even in the face of continued demand for goods."

On the other hand, buyers do seem to be working closer with vendors to make their nearterm needs known a little bit faster. Then too, there has been a drop in the percentage of PMs purchasing on a hand-to-mouth basis. As of latest report, only 11% were willing to take this tack—down from the 15% noted as recently as August.***PW***

Monthly procurement status report

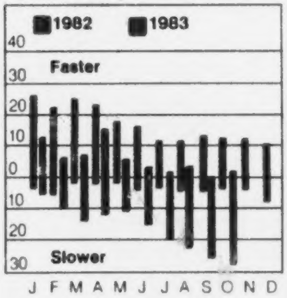
Leadtime index

A 'diffusion' index based on 158 key commodities. Above '50' indicates a tendency for leadtimes to stretch out. Below '50' suggests improving vendor performance.

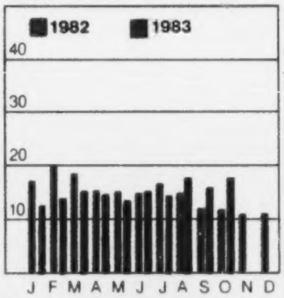


Delivery performance

Percent reporting deliveries

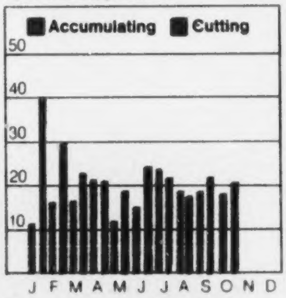


Forward commitments



Inventory strategy

Percent of respondents



Source: NAPM

Leadtimes and availability

Chicago: Semiconductors are out as much as 42 weeks, with IC waits put at 26 weeks or more. Also out are capacitors (to 12-16) and printed circuit boards (8-13). Ditto, hot-rolled steel sheet (3-4) and brass and copper sheet (8-10). But software plywood has come in a bit (to only 2 weeks) as have electrical materials (to 1-2).

Cleveland: Coil coating paint has moved out (to 5 weeks). Ditto, cold-finished aluminum (to 10-12) and selected electronic parts. Other typical (unchanged) leadtimes in weeks: alloying materials (on demand), glassines and greaseproof papers (45), lumber (3), plastic packaging (2-3), and reconditioned steel drums (1-2).

Los Angeles: Items moving out (with new weekly leads in parentheses): galvanized steel (8-10), pumps (8-10), electro-mechanical devices (8-10), stainless steel (12), semiconductors (24-36), wire and cable (10-12), electrical equipment (24). But in are copper tubing and fittings (4-6), custom seals and gaskets (4-6).

BUSINESS DATATRAK

Houston: Longer waits, first noted last month, continue for reciprocal compressors and field-fabricated pressure vessels. Some stretchout is also expected in oil field drilling equipment. Other typical leads: component parts (4-8), MRO items (2 -4), electronic components (17-35), packaging (0-4), and mill steel (4-8).

Philadelphia: Longer waits for selected electronic components, with these new leads (in weeks): Memory ICs (24-26), power supplies for components (12), tantalum capacitors (10-12), electrolytic capacitors (26-30). Microprocessors are almost impossible to find. Stainless bar and wire are also out (to 8-10).

Pittsburgh: Laminating paper is out a bit (to 6-9 weeks). Other leads (in weeks)—all basically unchanged: paper bags (4-6), multiwall bags (6), corrugated and folding boxes (3-4), fiber and steel drums (1), lumber (3-4), maintenance paint (5), polyethylene and PVC (4), most metal alloys (2), steel strapping (2-3).

Leadtimes (in weeks)

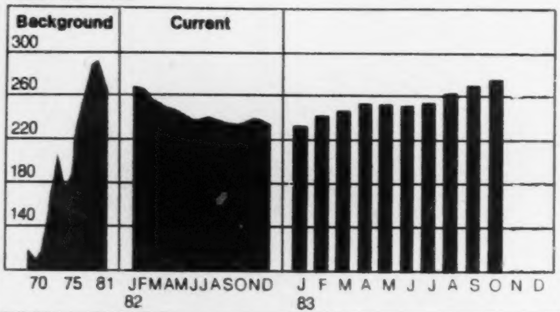
	Now	Month ago	Six months ago
STEEL			
Sheet (Phil)	7	7	5
C-R Sheet (Chgo)	10	10	13
Plate (Phil)	6	6	4½
Plate (Chgo)	3	3	2
Reinforced (Hous)	6	6	6
H-R Bars (Phil)	4½	4½	3½
H-R Bars (Chgo)	2½	2½	2
Cold-Drawn Bars (Phil)	4½	4½	6
Galvanized (LA)	11	7	9
Galvanized (Chgo)	7	7	9
Structurals (Chgo)	2½	2½	2
Structurals (Hous)	17	17	17
Tubing (Phil)	6	6	6
Grey Iron Castings(LA)	6½	7	12
Steel Castings (Hous)	11½	11½	11½
Forgings (Hous)	7	7	7
Pipe, Carbon (Hous)	13	13	20
ELECTRIC & ELECTRONIC			
Cables (Chgo)	8½	8½	8½
Capacitors (Chgo)	14	13	13
Circuit Breakers (Chgo)	6	6	6
Electromech. Devices (LA)	9	8	5
ICs (Linear) (Phil)	11	11	11
Motors (Phil)	21	21	21
Motors, 1000 hp & Up (Hous)	39	39	39
Printed Circuit Boards (Chgo)	10½	7	7
Relays (Chgo)	15	15	15
Resistors (Chgo)	10	10	10
Resistors, Wirebound (Phil)	9	10	10
Transformers (Chgo)	10	10	10
LUMBER			
Hardwood (Pgh)	3	3	3
Hardwood (Clev)	3½	3½	3½
Plywood (Chgo)	2	2½	2
Plywood (Phil)	1½	1½	1½
Softwood (Clev)	3	3	3
Softwood (Phil)	1/5	1/5	1/5
Softwood (Pgh)	3	3	3
Particleboard (Phil)	2½	2½	2½
CHEMICALS-PLASTICS			
Adhesives (LA)	½	½	½
Naphthalene (Chgo)	2	2	2
Paint (LA)	5	4	4½
Paint, Coil Coating (Pgh)	4	4	3
Paint, Maint. (Clev)	2	2	2
Polyester Resin (LA)	2	2	2
Polyethylene Resin (Clev)	2½	2½	2
Polyethylene Resin (Pgh)	4	4	4
PVC Resin (Chgo)	2½	2	2
PVC Resin (Pgh)	4	4	4
Titanium Dioxide (LA)	1	1	1
PACKAGING			
Bags, Kraft (Pgh)	5	5	5
Bags, Multiwall (Clev)	9	9	9
Bags, Multiwall (Pgh)	6	6	6
Cartons, Corrugated (Clev)	3	3	3
Cartons, Corrugated (Hous)	3	3	3
Cartons, Folding (Phil)	6½	6½	6½
Cartons, Folding (Pgh)	3½	3½	4½
Cellophane Wrap (Phil)	5	5	5
Plastic Bags (Pgh)	3½	3½	3½
Plastic Pkg. (Pgh)	3	3	3
Shrink Film (Chgo)	4	4	4
Shrink Film (Clev)	3	3	3
Drums, Fiber (Pgh)	1	1	1
Drums, Steel, Std. (Pgh)	1	1	1½
Wood Pallets (Chgo)	2½	2½	2½
Wirebound Boxes (Pgh)	4½	4½	4½
Strapping (Clev)	2½	2½	2½
Strapping (Pgh)	3	3	3
PAPER			
Fiberboard (Clev)	3½	3½	3½
Glassine (Clev)	4½	4½	4½
Glassine (Pgh)	5½	5½	5½
Groundwood (Clev)	4½	4½	4½
Groundwood (Pgh)	7	7	7
Kraft (Clev)	1	1	1
Kraft, Bleached (Clev)	1	1	1
Kraft, Bleached (Pgh)	5	5	5
Kraft, Natural MFNS (Clev)	1	1	1
Laminated (Clev)	8	8	8
Tissue (Pgh)	5½	5½	5½
NON-FERROUS			
Aluminum Coil (Chgo)	11	11	13
Aluminum Plate (Chgo)	9	9	9
Aluminum Sheet (LA)	4½	4½	5
Aluminum Sheet (Chgo)	14	14	12
Brass Castings (LA)	7	7	8
Brass Rods (Chgo)	3½	3½	4
Brass Sheet (Chgo)	9	8	4½
Brass Tube (Chgo)	9	9	5
Copper Fittings (LA)	5	6½	5½
Copper Mill Prod. (Pgh)	6	6	6
Copper Tube (LA)	5	6½	4
Copper Tube (Phil)	6	6	6
Lead (Pgh)	2	2	2
Magnesium (Pgh)	2	2	2
Manganese (Clev)	1	1	1
Nickel (Clev)	1	1	1
Nickel (Pgh)	2	2	2
Silicon (Clev)	1	1	1
Tin (Pgh)	3	3	3
Wire, Specialty (LA)	5	5	5
Zinc (Pgh)	2	2	2
MISCELLANEOUS			
Bearings, Domestic (Phil)	12	12	12
Bearings, Foreign (Phil)	26	26	26
Boilers & Furnaces (Hous)	35	35	35
Compressors, Centrifugal (Hous)	52	52	52
Compressors, Reciproc. (Hous)	39	39	39
Fasteners (Chgo)	½	½	½
Fasteners (LA)	4	4	6
Fasteners, Std. (Phil)	2	2	3½
Heat Exchangers, Carbon-alloy Steel (Hous)	20	20	30
Heat Exchangers, Hi-pressure (Hous)	21	21	43
Insulation Mat'l. (LA)	7	7	9
Machined Parts (Hous)	9	9	9
Pipes & Valves (Chgo)	1	1½	1
Pumps (Hous)	39	39	41
Pumps (LA)	9	7	12
Rubber, Synthetic (LA)	2	2	2
Rubber Hose (LA)	4	6	5
Tungsten Carbide Parts (Hous)	15	15	15
Valves, Cast Steel (Hous)	8	8	8
Welding Supplies (Hous)	5	5	5

BUSINESS DATATRAK

Raw material price barometer

Index: 1967 = 100

Latest month	**273.4**
Month before	**256.0**
Year ago	**235.3**



Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	347.00	347.00	347.00
Steel, structural shapes, Pitts., cwt.	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt.	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt.	24.40	24.40	24.40
Steel, bars, dlvd. Phila., cwt., merchant quality	17.50	17.50	14.35
Steel, bars, Pitts, cwt.	17.5	17.5	14.35
Steel, bars, C.R., Pitts, cwt.	26.00	26.00	31.00
Steel, plates, Pitts., cwt.	25.75	25.75	24.25
Steel, plates, H.R., Pitts., cwt.	25.75	25.75	24.25
Steel, sheets, C.R., Detroit, cwt.	26.15	26.15	24.65
Steel, strip, C.R., Chi., cwt.	35.30	35.30	29.05
Steel, basic wire, Pitts., cwt.	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	0.740	0.755	0.450
Antimony, in alloy, lb.	2.00	2.00	2.00
Beryllium-copper, cost ingot, lb.	4.95	4.95	4.95
Brass, red, 85%, [sheet], lb.	1.19	1.23	1.19
Brass, yellow, [sheet], lb.	1.14	1.17	1.13
Cadmium, ton lots, lb.	1.25	1.25	1.00
Copper, electrolytic, wire bars, refd., lb.	0.65	0.73	0.68
Copper sheet, over 24 in., lb.	1.28	1.32	1.28
Lead, common, N.Y., lb.	0.25	0.25	0.23
Magnesium, pig ingot, [99.8%], lb.	1.38	1.38	1.34
Mercury, 20 fl. lots, N.Y., fl.	345.00	317.00	378.00
Molybdenum Climax Oxide/bags, lb.	4.65	4.65	5.85
Nickel, electrolytic, producer, lb.	3.20	3.20	3.20
Platinum, producer, oz.	475.00	475.00	475.00
Silver, N.Y., oz.	8.92	10.43	10.13
Tin, Straights, N.Y., lb.	6.52	6.41	6.20
Zinc, Prime West, East St. Louis, lb.	0.49	0.46	0.40
Zinc, die casting alloy, No. 3, lb.	0.555	0.525	0.475
PAPER			
Uncoated book 13 offset, ton	760.00	730.00	800.00
Watermarked bond, ton	915.00	845.00	845.00
Gummed sealing tape, carton	15.41	15.44	15.70
Boxboard, mach. clay ctd. recycled sheets 80 bright, .016, ton	475.00	475.00	475.00
Wrapping paper, std. distribution cost, kraft, basis wt. 50 lb., roll	28.00	28.00	28.00
Kraft linerboard, 42 lb., unbleached, ton	290.00	290.00	250.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd.	0.289	0.284	0.262
Cotton drill, 1.85, 59", 68x49, N.Y., yd.	1.02	1.00	0.97
Cotton middling, 1", N.Y., lb.	0.731	0.712	0.579
Printcloth, 48", 80x80, N.Y., spot. yd.	0.855	0.740	0.550
Army duck, 37", 13 oz., yd.	1.69	1.63	1.00
Blended printcloth, 64", 78x54, yd.	0.74	0.74	0.65
20s combed yarns	2.10	2.10	1.70
Wool tops, N.Y., lb.	3.60	3.60	3.60

	Latest price	Previous month	Year ago
CHEMICALS			
Acrylonitrile, tanks, lb.	0.43	0.43	0.46
Ammonia, anhydrous, fertilizer, wholesale, tanks, ton	195.00	160.00	210.00
Benzene, petroleum, tanks, Houston, gal.	1.47	1.50	1.50
Caustic soda, 76% solid, drums, carlots, cwt.	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb.	0.58	0.58	0.66
Formaldehyde, USP, 37%, [12% to 15% meth.], tanks, lb.	0.106	0.106	0.101
Glycerine, synthetic, tanks, lb.	0.730	0.730	0.725
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	0.450	0.480	0.715
Naphthalene, crude, tanks, lb.	0.22	0.22	0.22
Phthalic anhydride, tanks, lb.	0.305	0.305	0.310
Polyethylene resin, low density liner film grade (market price), lb.	0.38	0.38	0.27
Polypropylene, homopolymer grade (market price), lb.	0.40	0.37	0.37
Polystyrene, general purpose grade (market price) lb.	0.40	0.37	0.38
Shellac, bone dry, N.Y., lb.	1.65	1.65	1.65
Soda ash, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	0.350	0.350	0.335
Sulphur, crude, ex-terminal, Tampa, Fla., lt.	132.50	132.50	135.00
Sulphuric acid, 66%, commercial, tanks, ton	56.35	56.35	56.35
Titanium dioxide, anatase, reg., carlots lb.	0.69	0.69	0.69
Xylene tanks, gal.	1.33	1.33	1.45
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	327.35	330.50	292.50
Lumber 2x2, pine, mbf, cl	324.70	322.90	280.05
Plywood, plyform, 3/4", msf, cl	551.35	546.70	554.95
Plywood, 5/8", msf, cl	366.45	357.15	342.29
Cement, bulk, ton, tl	61.88	61.79	62.07
Sand, ton, cl	5.99	5.96	5.88
Ready-mix concrete, 3,000 psi/cu. yd., 15 cu. yd.	45.64	45.73	45.54
Crushed stone, 1½", ton, cl	8.01	8.00	7.77
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.76	0.76	0.76
Gypsum sheathing, ½"x1"x8", msf, tl	172.93	171.46	156.32
Brick, common, per thousand, tl	174.35	172.05	176.15
Asphalt paving, AC-20	158.71	158.71	156.77
Concrete sewer pipe, 12", prem. joint, per foot, cl	6.80	6.66	6.61
FUELS			
Fuel oil, No. 6 or Bunker C, Gulf., bbl.	25.25	25.75	25.75
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	30.50	31.25	33.75
Gasoline, 91 oct., reg., Los Angeles, rack, gal.	0.780	0.758	0.920
Gasoline, 94 oct., reg., Chi., tank car, gal.	0.833	0.855	0.933
Heating oil, No. 2, Chi., bulk, gal.	0.828	0.828	0.980
Heating oil, No. 2, N.Y., bulk, gal.	0.848	0.848	0.103
Heavy fuel, PS 400, Los Angeles, rack, bbl.	26.25	26.25	26.85
Jet kerosene, gal.	0.815	0.803	0.970
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	0.490	0.490	0.525
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	85.00	82.00	51.00
Steel, No. 1, hvy., dlvd., Chi., ton	77.00	77.00	44.00
Copper, No. 1, East, wholesale buy, dlvd., lb.	0.575	0.625	0.565
Copper, No. 2, East, wholesale buy, dlvd., lb.	0.475	0.535	0.505
Brass, red, East, wholesale buy, dlvd., lb.	0.535	0.585	0.525
Brass, yellow, East, wholesale buy, dlvd., lb.	0.33	0.36	0.33
Alum., old sheet/cast, E., wholesale buy, dlvd., lb.	0.450	0.475	0.225
Alum., mixed clip., E., wholesale buy, dlvd., lb.	0.475	0.495	0.235
Zinc, old, East, wholesale buy, dlvd., lb.	0.190	0.145	0.090
Lead, clean solids, East, wholesale buy, dlvd., lb.	0.14	0.14	0.14
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	25.00	28.00	5.00
Paper, old corrug. box, dlr., N.Y., ton	20.00	22.00	4.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb.	0.100	0.100	0.130
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb.	0.33	0.33	0.34

[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]

Transportation cost forecast

Price increases revised downward

More good news for buyers of transportation services: Not only has the overall 1983 increase been revised downward to less than 2% (see freight rate index chart), but increases for 1984 and 1985 will generally be somewhat under levels anticipated just three months ago.

The new forecast—the latest in a series of quarterly transportation reviews supplied to ***PurchasingWorld*** by Wharton Econometrics—is based on several factors: (1) the continuing impact of deregulation, (2) still-substantial carrier overcapacity, (3) weak fuel prices, and (4) stable or even somewhat lower labor costs.

The impact of the first two factors (deregulation and overcapacity) means continuing keen competition for the shipper's dollar, both within and among the various modes. And, says Wharton, this should be enough to hold rate hikes down for at least another few quarters.

All this is not to say, of course, that there won't be some substantial rate acceleration later on in 1984 and 1985, as overcapacity pressures lessen, oil prices begin to increase again, and labor regains some of its bargaining leverage.

But even then, boosts should be in the tolerable range. In the rail sector, for example, hikes of 6.6% and 7.5% are anticipated for 1984 and 1985, respectively. But as in the case of overall transportation rates, this will be about one-half a percentage point under estimates made this summer.

But good bargains for shippers should continue even after carrier demand does show a substantial pickup—primarily because of deregulation.

Keeping these factors in mind, here are some other cogent observations and projections on a mode-by-mode basis:

- **Railroads:** The industry has benefitted greatly from the increased freedom resulting from deregulation. The railroads have made a number of innovative improvements in shipping and billing which have allowed them to increase their share of intercity traffic. So far, all this has been achieved with little or no major price increases.
- **Trucking:** Carriers continue to have trouble adjusting to deregulation. As a result, they will not enjoy growth as rapid as that of their chief competitor—the railroads. Thus, overcapacity will remain a problem here for quite some time. But increased demand, a thinning out of the industry, and increased taxes on truckers will all continue to lead to stronger rate growth in 1984.

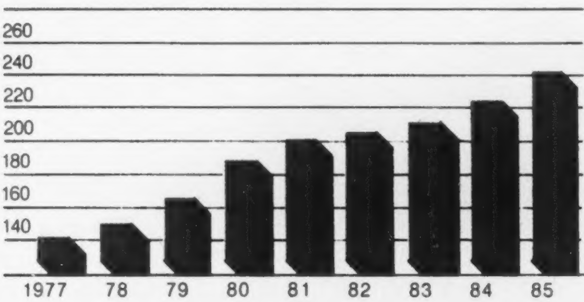
On the latter score, next year's estimated increase (7.9%) is more than double this year's estimated 3.6% increase and more than a percentage point higher than the 6.6% increase seen that year for rails.

- **Barges:** As noted three months ago, decreased grain and coal shipments, combined with severe overcapacity problems, will lead to a decrease in barge rates this year. But the decline (1.3%) is about half that anticipated a few months ago. Beyond that time frame, the industry will likely face increased waterway taxes—something that will push barge rates up 6.4% in 1984 and 7.6% in 1985.
- **Air:** Carriers are stepping up their efforts to cut costs (consider recent rate reductions by Continental and Eastern) and to increase prices in order to get back into the black. But, again, the nearterm rate increases forecast for this industry will apply primarily to bulk freight.

As for the overall industry trend over the longer pull, Wharton sees some fair-sized rate hikes coming down the pike (8.4% in 1984 and 11.2% for the ensuing year) making this the fastest rising sector as far as rates are concerned.***PW***

***PurchasingWorld* freight rate index**

Index: 1972 = 100

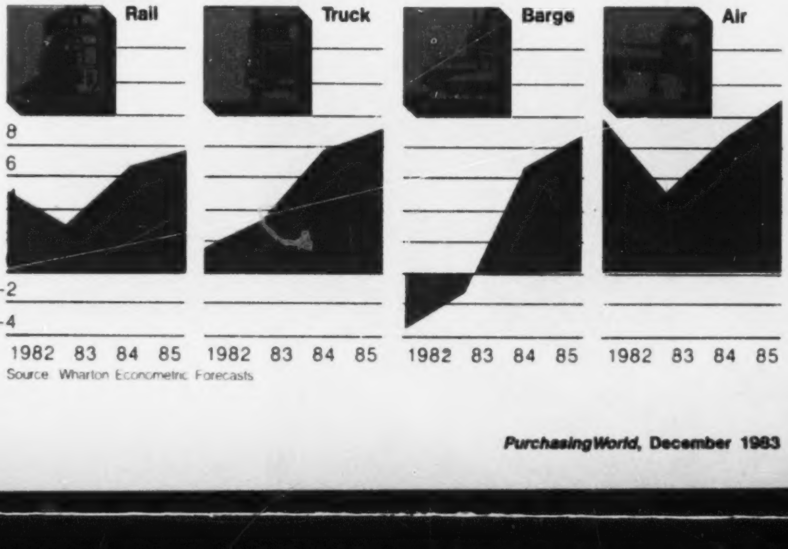


Increase over previous year	
1977	6.4%
1978	7.9%
1979	9.4%
1980	12.7%
1981	7.6%
1982	1.5%
1983	1.9%*
1984	7.0%*
1985	8.0%*

*Estimated

Freight cost outlook by mode **(Increase over previous year)**

Percent increase



Source: Wharton Econometric Forecasts

WHAT PMs ARE THINKING

Widespread discounting continues

Business may be firming. But shop around a bit, and you can still find plenty of off-list bargains.

Close to two out of every three PMs queried in a new ***Purchasing-World*** nationwide survey, for example, say they continue to get some kind of discount or other price concession on at least some of their major purchases. And a lucky one out of five say they rarely (20% ofthe time or less) pay list on their big-volume buys

True, markets aren't quite as soft as they were at the beginning of the year. Those reporting a drop in price shading since that time, for instance, outnumber those reporting more concessions by a 7:1 margin. But opportunities are still there. As one Ohio-based purchasing executive puts it, "Look hard enough, and more often than not you can whittle something off the initial asking price."

This is an opinion confirmed by the long list of items where PMs continue to report "good buys"—a list which currently includes such major product lines as steel, copper products, castings, forgings, tooling, machinery, office equipment, fuels, lubricants, valves, bearings, fasteners, paper, motors, fittings, hoses, and many widely used chemicals and plastics.

Obtaining an extended price guarantee is the most often used way of getting price breaks on many of the items previously listed. Indeed, almost three out of every four respondents list this as a typical concession.

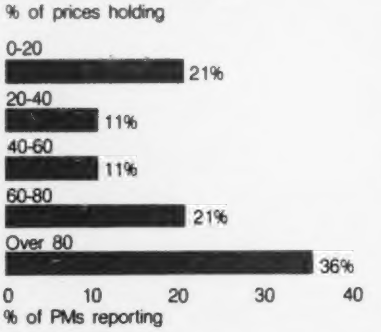
But there are other popular ways to skin the cat, too. In descending order of importance (with the percent of PMs reporting success with each), they are: outright cash discounts (60%), freight absoption (42%), more liberal terms of sale (35%), receiving higher-than-paid-for quality (26%), improved servicing (16%), and the throwing in of extras (10%).

The survey also suggests that these "under list" pricing gimmicks are paring anywhere from 3% to really significant amounts off overall procurement bills. On the upper end of the range, for example, a surprising half of the respondents estimate that they are still able to knock upwards of 10% off the typical list price.

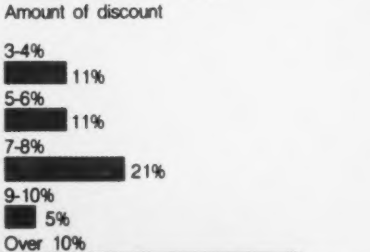
More important, while most feel these special deals will slowly begin to narrow, few expect any quick shift back to a sellers' market. The majority (68% to be exact) don't see this happening before next fall—or even later.

Summary of discounting activity

Frequency of price shading



Average discounts obtained



These same PMs emphasize that this appraisal is based on more than just wishful thinking. Many, for example, feel that more-than-ample capacity will keep vendors on the defensive. Others point to continuing foreign competition—aided by a strong dollar which, other things being equal, lowers the price of incoming shipments. It's the kind of climate, says one buyer, where you can almost always find someone willing to shave quotes a bit if he's promised a big-volume order.

But whatever the competitive factors involved, buyers seem determined to remain in the driver's seat as long as possible. Many say they'll continue to press for longterm pacts that lock in current prices for up to a full year. Several add that they have already been succesful in negotiating some 1984 prices at existing 1983 levels.

Another buyer, this one from a hardhit smokestack industry, takes a different tack. His firm, in essence, pleads poverty, pointing out that it would be unable to pass along any big cost increase anytime soon.

A few PMs also are trying to consolidate their list of vendors, concentrating on fewer and offering them the carrot of bigger orders.

In the words of one Midwestern buying executive, "We feel this can pay off in several ways by (1) providing us with more bargaining leverage, (2) allowing us to concentrate on firms offering the best quality and reliability potentials, and (3) showing the vendor that we are willing to make a longterm committment if the price is right."***PW***

JAN/1984

PurchasingWorld

2/3/84
C4670-1B

THE UPSWING CONTINUES

A special economic forecast on what's in store for 1984 as viewed by ten different sources.

PurchasingWorld

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HUEBNER PUBLICATIONS, INC.
Subsidiary of International Thomson Business Press

Editorial offices:
600 S. Northwest Highway
Barrington, Ill 60010
Phone: 312—381-6971

PW PREDICTS

Robert S. Reichard, executive editor

Modest price increases expected

It's virtually unanimous. Some price acceleration is unavoidable over the next 6-12 months. But by and large the increases should be manageable—especially in light of the fact that 1984 will be the second year in what is shaping up as a fairly substantial business recovery.

Indeed, look over projections of top PMs, economists, sales executives, and econometric models, and the feeling seems to be that, if things go according to plan, we should be able to avoid the sharp advances that eventually undermined the last two recoveries.

Here in a nutshell is what these sources see ahead:

- **Purchasing managers:** Respondents to a ***PW*** survey put the average 1984 increase in their procurement costs at around 5%. And only a miniscule 2% see a return to double-digit boosts. Members of the prestigious NAPM Business Survey Committee tell much the same story. The majority (85%) are reconciled to price hikes, but only 3% see them as severe.
- **Economists: *PW's*** Dr. Louis J. Paradiso puts the 1984 increase in the GNP price deflator at 5%. And Joel Popkin, perhaps the nation's leading econometric price analyst, concurs—adding that primary products, traditionally the fastest rising sector in a recovery, will also show rather restrained advances this time around.
- **The executive suite:** Leading corporations come up with a similarly upbeat 5% advance for the prices of the products they sell—with only metals approaching a 10% inflation rate.
- **Econometric models:** A review of four of the major models points to these 1984 increases: GNP price deflator—4.7%, consumer prices—5.1%, and industrial prices—5.1%.

Comments and analyses by these sources suggest several reasons why 1984 inflation will remain in the tolerable range. These include (1) ample capacity in most industrial sectors, (2) expectations of only modest wage boosts—and even this should be partially offset by a 2-3% increase in worker productivity, (3) another year of relatively stable oil prices, (4) only a modest 3-5% increase in food tabs, and (5) a still-strong dollar, which will enable foreign competition to play a role as a price-rise inhibitor.

These factors won't, of course, preclude some price increases as demamd continues to improve. But the 5%-or-so increase in overall price averages now anticipated is a lot better than the second years of the 1973-74 and 1979-80 recoveries when GNP prices rose 8.8% and 9.3%, respectively.

Copper

Prices remain soft. Producer quotes are hard put to break the 70¢/lb barrier. Signs of easiness are all around, with perhaps the most crucial being the continued rise in exchange stocks (now well over 825,000 tons). Also holding down the market are (1) the up-to-now poor capital equipment demand, which accounts for close to 60% of all U.S. chewup, (2) continued all-out production by Third

Nickel

The nickel market could be poised for a modest recovery.

One reason: Inventories (while still on the high side) are down considerably from year-earlier levels. More important, demand is finally showing some signs of picking up as key capital goods markets slowly begin to recover.

Right now the industry is talking in terms of selling 1.2 billion lb on a Free World basis over the new year. That's a fair-sized 9% jump over the past year's estimated 1.1-billion-lb total which, in turn, was well above 1982's extremely disappointing 975-million-lb level.

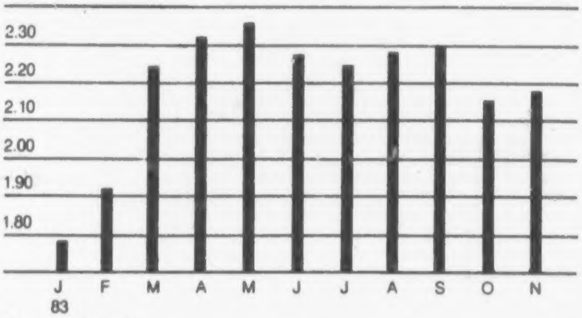
All this, in turn, is bound to firm up prices, which are still close to $1/lb under the official $3.20/lb list (see chart). And while no big spiral is anticipated, it is not inconceivable that the metal could be commanding $2.60-2.70/lb by yearend.

And the uptrend should continue into 1985—enabling producers to finally regain list levels. Reason: The industry feels that 1985 gains could approach the double-digit level as demand for machinery, oil country goods, petrochemical plants, and defense all continue to grow.

On the other hand, the longterm growth rate isn't all that earthshaking—with only a 2-3% annual gain projected over the remainder of the decade.

Nickel prices for 1983 (dealer cathode)

Dollars per pound



Source: Metals Week

PW PREDICTS

Aluminum

CURRENT SITUATION: Ingot has temporarily levelled off in the mid-70s range—some 6¢/lb under the official list. Behind the pause: recent production increases, declining producer inventories, and continued good demand. But the lull does not seem to apply to fabricated items, where new 5% hikes have been posted on common alloy plate, flat sheet, and coiled sheet products. Another sign of firming: **lengthening leads—with waits in some areas stretching to as long as four months.**

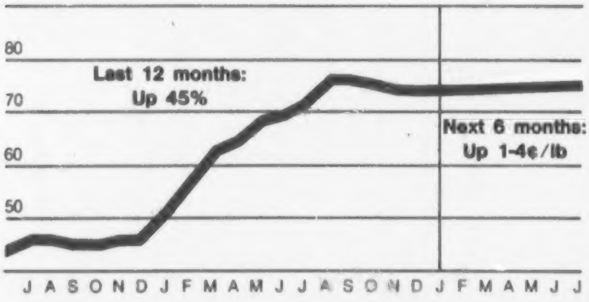
DEMAND: Buying both here and abroad has picked up sharply. U.S. shipments in 1983 reached 6.6 million tons—up 12% from year-earlier levels, **with another gain to near 7 milion tons anticipated for 1984.** And the same is true on a Free World basis where consumption rose a hefty 11% over the past year. All signs point to another 7-8% increase for the new year. **Longterm growth, however, is likely to be more restrained**—in the 2.5-3% range.

SUPPLY: Better overall market balance is likely by late winter or spring as potline reactiviation adds to the available tonnage. And there's more capacity waiting in the wings. **The Free World is still operating at only 83-85% of its potential.** Then, too, there's a still-growing share contributed by recycled metal. **In short, it's still a basically no-sweat situation.**

PRICE OUTLOOK: More boosts are inevitable as demand continues to increase and costs edge higher. But because higher operating rates will put more metal on the market, **the advances are likely to be relatively moderate**—with ingot moving up about 1-4¢/lb over the next six months on both the market and list levels. **By this time next year, the price should be approaching 90¢/lb.** Fabricated products will move up similarly.

Aluminum ingot (market prices)

Cents per pound



World countries, and (3) new competitive inroads by fiber optics and plastics. nor does the new year promise any dramatic change. True, prices may will edge up toward the 80¢/lb level as the new year wears on. But that would harly put the industry back on its feet inasmuch as prices would still be lagging costs.

Muriatic acid

Higher costs for chlorine (just boosted $15/ton), labor, and energy have prompted producers to post a new $5-10/ton increase, bringing quotes into the $65-75/ton range. Firmer demand from steel makes could be another factor in the rise. In any event, these new quotes are a far cry from last year, when sagging demand dropped the 20° grade to as low as $50/ton.

Computers

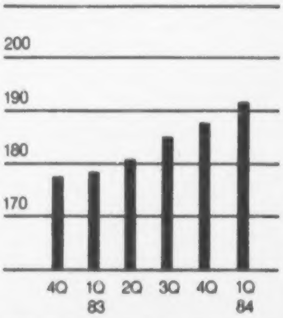
Watch for Taiwan to flood the market with "lookalike" and "fake" copies of IBM's popular personal computer. Some of the models could sell for less than half the IBM price. So warn analysts at International Resource Development. The market-research firm adds that additional clones could be on the way from Hong Kong and Singapore, too.

Electronic parts

The market remains hot as orders continue to tumble in for such key items as semiconductors and microprocessors. In fact, the latter is now reported to be in short supply. Sing of the times: Overall shipments in real or physical terms, which rose 6% in 1983, are targeted for gains of 15% in 1984 and 12% in 1985. not surprisingly, prices are moving up, with averages up about 5% this past year. But capacity, idled by slack demand during the recession, is being put back on line, so prices are likely to rise only about 5-6% over the next 12 months.

Electronic component prices

(Index: 1967 = 100)



Lead

Some nearterm softness can't be ruled out as battery demand drops off seasonally. Also suggestive of possible nearterm weakness are (1) recent low LME quotes, (2) less-than-sensational overall U.S. consumption as tetraethyl lead continues to fall, (3) increasing secondary production sparked by recent summer and early fall price boosts, and (4) low import prices. Indeed, if the current 6-7¢/lb U.S.-LME differential widens any further, a U.S. price cut may be inevitable. But recovery is likely by late summer as the next battery buying season get under way. Prices at that time will probably rise to near 30¢/lb.

Polyethylene

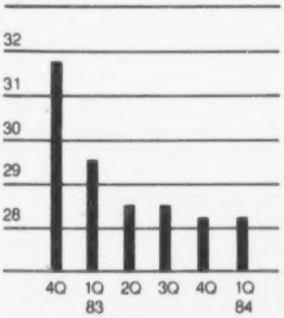
New first-quarter price boosts are being posted on LDPE, LLDPE, and HDPE—some ranging as high as 4¢/lb. This would put LDPE, which has recently been selling at around 44¢/lb, in the high 40s range. Behind the increases: strong demand and a relatively tight supply situation. On the latter score, operating rates are now said to be in the high 90-95% range, with most producers shipping out virtually every pound of the resing they are making. And incoming orders indicate much the same picture for early 1984.

Crude petroleum

Some minor price declines can't be ruled out—despite OPEC's avowed determination to hold the line at the current $29/bbl benchmark level. Some observers feel, for example, that the cartel would have to drop nearterm production to between 16 and 16.5 million barrels per day—off substantially from the current 17.5 million bpd level. Behind the easiness: cheating by OPEC members, increasing non-OPEC supplies, and less-than-anticipated demand recovery. On the latter score, note that current forecasts suggest only a 2.6% increase in U.S. consumption in 1984—only about half the projected GNP gain.

Crude petroleum prices

U.S. refiner cost ($/bbl)



Stainless steel

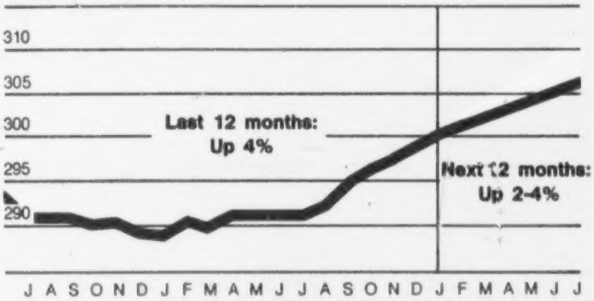
Prices are finally showing signs of firming, mostly in the form of reduced discounts. On the sheet and strip front, for example, the discounts are being cut by about 10 percentage points as demand improves (up nearly 25% in 1983) and leadtimes stretch to as long as 12-14 weeks. Buyers of bar and wire also face higher market prices as producers knock 5-10 percentage points off discounts, which had been ranging as high as 30% on commodity grades. Some attempts are also being made to reduce off-price selling of stainless plate, though the market here remains extremely competitive.

PVC

Demand has slowed, putting price pressure on both the monomer and resin.

Chemicals

Index: 1967=100



CURRENT SITUATION: The industry has staged a fairly substantial recovery—with the $180 billion in chemical and allied products clearing the market in 1983 representing a 5% rise over 1982. Production gains have been in the 8-9% range. **On the other hand, prices—because of relatively stable feedstock costs and continued competition—have moved up quite slowly.** Although prices have recently gone up on some products, the overall gain for 1983 was only about 4%.

DEMAND: Right now, all signs point to a solid 6-7% gain over 1983 averages. **But increases will be uneven**—with these advances likely: industrial chemicals (7%), paint (10% or more), plastic resins (8%), drugs, soaps, and toiletries (6%), and agriculture chemicals (4%). Further confirmation comes from chemical producers themselves—with top executives **putting the real sales gain over the next 12 months in the 6% range.**

SUPPLY: Very few problems—despite the gains projected. Operating rates in 1984 may average only 80%—still well under preferred levels, though a fair-sized improvement over the past year's 75% average. Then, too, surveys suggest that capital spending will be up close to 9% over the coming year. To be sure, much of this will be for replacements and installation of nonproduction equipment such as computers. Nevertheless, the gains look to be large enough to keep **buyers in the drivers seat in most major markets.**

PRICE OUTLOOK: Continuing competition indicates relatively modest increases. Also adding to the price restraint will be continued soft petrochemical feedstock quotes, industry cost-cutting, and the improved efficiency indicated by new capital outlays. **It's hard to see 1984 averages rising by much more than 4-5%**—quite modest in view of demand gains and the nation's overall inflation rate.

Pipe grade PVC, which accounts for 40% of total resin volume, recently dropped to as low as 27.5¢/lb—some 10¢/lb under recent summer highs. True, a new attempt is being made to at least partially recoup the loss, with a new 2¢/lb boost posted for this month. But chances of it holding are only about 50-50. Adding to the downward pressure is the recent opening of a new 300-million-lb plant and the reactivation of a 200-million-lb plant. Upshot: Even if you factor in a good 1984 (some 6.6 billion lb), that would still leave demand considerably under the estimated 8.3-billion-lb capacity level.

Paper

Factor in higher prices for most paper products over the next 6-12 months.

Indeed, prices in both corrugated and fine paper markets have already moved up significantly in recent weeks. In the latter sphere, for example, most grades have just gone up about 6%—though trade discounts may be pulling this average down a bit.

In addition, all signs point to more of the same in 1984. Reason: strong demand (up 6% for paper this past year and an even larger 8-9% in paperboard). And this demand trend is likely to continue, with the industry now predicting 6-7% gains in both paper and board for the new year. This, in turn, should push operating rates above the already high mid-90s.

On the other hand, no real squeeze is anticipated; the industry prefers to operate at close to its full potential. Then, too, there are more—albeit relatively small—capacity increments coming onstream. As the chart suggests, paper and board potential should be riding 1.5% a year through 1986 (and 2.8% if you zero in on printing and writing grades). Thus, any major price runup should be prevented.

Another factor is improved cost performance. (Unit labor costs—thanks to a big productivity jump—actually dropped in 1983).

Best bet for the industry as a whole: a 1984 price boost of about 4-6%.

Paper & paperboard capacity gains
Average annual percent increase

	Last 15 years	Next 3 years
Newsprint	4.2	1.3
Printing & writing	3.1	2.8
Packaging & industrial conv.	0.6	-0.7
Tissue	2.5	2.3
Unbleached kraft board	3.3	1.4
Solid bleached board	1.4	1.2
Semichemical board	2.4	0.6
Recycled board	0.2	0.9

Zinc

Markets are marking time following recent price boosts. But the basic prognosis remains moderately bullish. One reason: The long slide in auto die cast parts seems over, with the figure stabilizing at near 23 lb per vehicle. Add in good galvanized demand, and this past year's U.S. consumption jumped a high 8-10%. And further advances both here and abroad are likely in 1984, with Free World consumption rising 5-6%. But there should be enough to go around as production also rises another 6%. This rough balance, in turn, suggests relatively modest price boosts. Quotes over the next 12 months should average in the low 50s range.

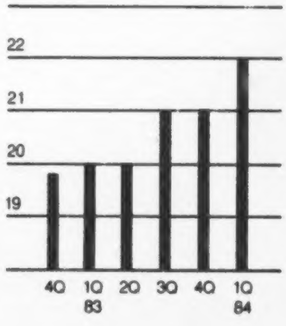
Phenol

Prices are firming. One producer has announced a 2¢/lb boost in lists (to 37.5¢/lb). Blame it on cost-push pressures. The demand outlook is also improving, with gains ranging as high as 11-12% projected for the upcoming year as housing continues to take additional supplies of this key chemical. Then, too, supplies have recently tightened, and large quantities are extremely hard to locate. This snugness, in turn, suggests that buyers may have to meet some of their needs overseas—in Western Europe, which has an excess, and in Japan, where a big, new facility has just come onstream.

Ethylene

Brace for new first-quarter price-boosting attempts following the failure of a fourth-quarter increase to hold. Producers are asking anywhere from 0.5 to 1.5¢/lb more for this key petrochemical building block, which would bring the going market price up to near 22¢/lb. But that would still be well under lists, which currently run in the 26-27¢/lb range. Demand would seem to suggest that the new increases will stick, as operating rates rise and the industry confidently looks for a substantial 5-8% increase in 1984 sales. But there is a powerful negative offset, too—namely, low propane and ethane feedstock costs, wich have actually dropped in recent months.

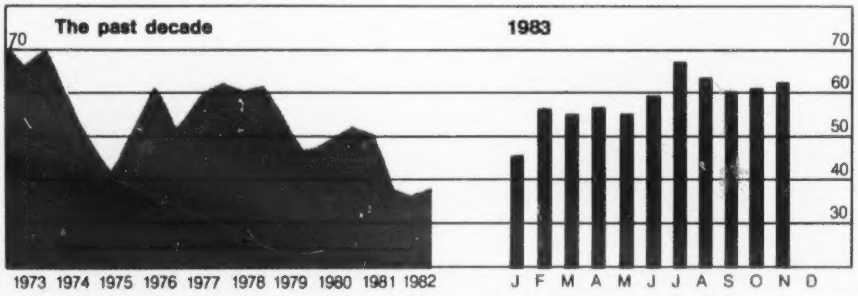
Ethylene prices
(cents/lb)



BUSINESS DATATRAK

NAPM business barometer

Based on five indicators (employment, inventories, new orders, production, vendor performance)



KEY ECONOMIC TRENDS

Leading indicators look good

The new year is getting off to a good start—with the next few months looking just as good as the last few months.

Certainly that's the picture now being spelled out by all the leading indicators. The NAPM Business Barometer (a time-tested yardstick of business activity a few months down the pike), for example, is still solidly in the plus column. The latest reading here is 62.9—actually above the previous month and nearly 13 points above the neutral 50 mark.

There are no real imbalances to speak of either. While inventories are on the rise, they're barely keeping up with accelerating production and sales. Not surprisingly, the factory stock/sales ratio is now being clocked in at 1.48—pretty close to the record low of 1.46 hit back in September.

In any event, this crucial ratio is low enough to assure that any further increases in final demand will be quickly translated into new output increases.

Also pointing to more gains ahead is the fact that factory orders have been outpacing shipments. The point to keep in mind here: The resulting backing of unfilled orders represents more than 3.5 months of production.

The fact that interest rates haven't moved up—despite the recent sharp business recovery—has to be regarded as yet another good omen. It indicates the Fed is not all that concerned about inflation—and hence should be providing enough money to keep the recovery going for at least another 6 months.

Consumers, too, remain in a spending mood—helping to make the just-passed holiday season the best on record. The bullishness also shows up in buying plans which have been on a relatively high plateau since last summer (see chart alongside).

About the only thing that has come down a bit are intentions to buy autos—where 8.2% now intend to buy a new car versus the 9.0% who said so a few months earlier.

But the latter should be regarded as a temporary aberration; spendable income and jobs are up and unemployment is down. During one recent 4-month period industrial jobs rose by an eye-opening 1.3 million.

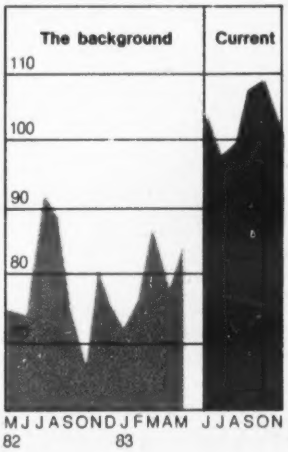
Capacity utilization still climbing

Factory utilization rates continue to climb—but still have a way to go before reaching preferred levels—at least as far as overall U.S. industry is concerned.

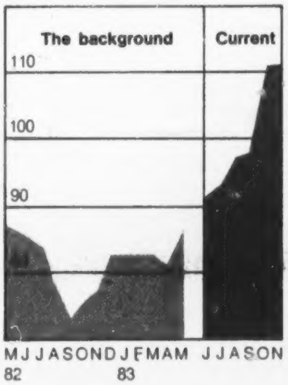
The gains over the past

Leading indicators

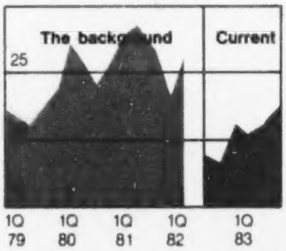
1. Consumer buying plans
(Index: 1969-70 = 100)



2. Help wanted
(Index: 1967 = 100)



3. Capital appropriations
(Billions $)



year are detailed in the accompanying chart. Note that metals (both steel and nonferrous) have shown some of the biggest 12-month jumps. But no one would even begin to suggest that these "smokestack" industries are booming—for their declines in both 1981 and 1982 were far greater than recent gains.

The auto industry, too, has jumped significantly over the past year—but again from very low rates. Note, for example, that the current reading is still under 80%—with foreign competition virtually ruling out any return to the 1978 peak of near 90%.

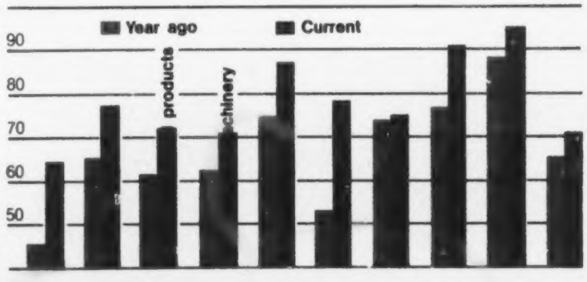
Nevertheless, the all-industry rise of the last year has been a solid 10 percentage points—and could be one reason why manufacturers are dusting off long-postponed expansion plans. Another reason for increasing interest in capital outlays could be that current higher operating rates are translating into higher profits and, hence, are making more money available for plant and equipment purchases.

But there seems to be little urgency in such expansion. True, there are two sectors where production bottlenecks have appeared—electronics and paper. But electronic firms are now busy reactivating previously shutdown facilities and the paper industry (now near the 95% level) could easily operate at 100% over a short period of time.

Also suggesting a relatively no-sweat overall capacity situation is the fact that capacity continues to increase. Indeed, even in depressed 1983, the nation's factories managed to add some 2% onto their production potential. And in 1984—with contemplated capital outlay boosts—the figure should easily top 2.5%, and thus help to partially offset production increases.

Industrial operating rates

Percent of capacity



Source: Federal Reserve Board

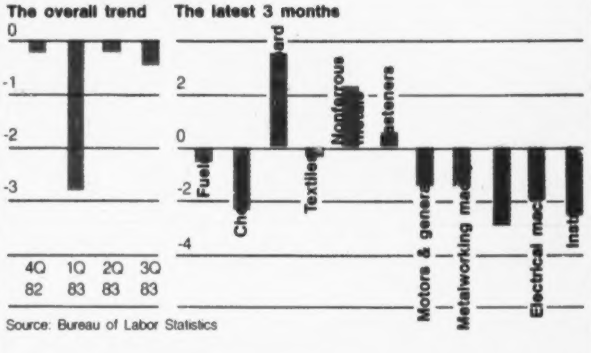
Import prices dropping slightly

Import prices continue to edge lower—with the latest average overseas quotes running better than 3% under a year ago.

What makes this even more newsworthy is that Uncle Sam's domestic producer price index rose about 2% over the same period of time. Conclusion: a potential savings of 5% on the average purchase mix for those willing to switch to imports.

Import prices

(% change from previous qtr)



Source: Bureau of Labor Statistics

Actually, the reasons behind this import trend aren't too hard to find: (1) a strong dollar which effectively reduces U.S. landed costs, and (2) lagging overseas domestic demands, which have prompted foreign suppliers to offer import bargains in order to keep their own factories operating at tolerably high levels.

To be sure,not all prices have continued to fall over the past few months (see chart for details), and some levelling off in these quotes may be in the offing later in 1984—especially if the dollar weakens as some analysts are predicting.

Here's how Labor Department analysts describe import trends over the past few months:

- **Fuels and related products:** Prices dropped 0.5%—the seventh consecutive quarterly decline. Natural gas and LNG are off the most—8.4% over the latest 3-month period and 17.9% over the past year.
- **Machinery and transport products:** New quarterly declines here are reported in specialized machinery (−2.9%), general industry machinery (−2.5%), office machines (−1.4%), and metalworking machinery (−1.5%).
- **Chemicals:** Prices were off 2.3% over the latest 3-month period. But because of earlier backing and filling, the year-to-year decline was also only off by a bit more than 2%.

CURRENT PRICES

Mixed price patterns reported

The old year has ended on another good note—with overall industrial prices actually slipping a bit. True, the drop was fractional. But it means that average quotes for the 12-month period just ended were less than 2% above year earlier levels.

Much of the respite over the past month can again be traced to soft energy tags. Specifically, declines were noted for home heating oil, gasoline, diesel fuel, LPG, kerosene, and commercial jet fuel—more than enough to offset scattered increases in natural gas and electric power.

Chemicals also remain on the shakey side. New declines were reported in both organic and inorganic formulations. Both plastic resins and manmade fibers also edged lower over the month—but in these cases, newly posted increases suggest gains again when January figures are released.

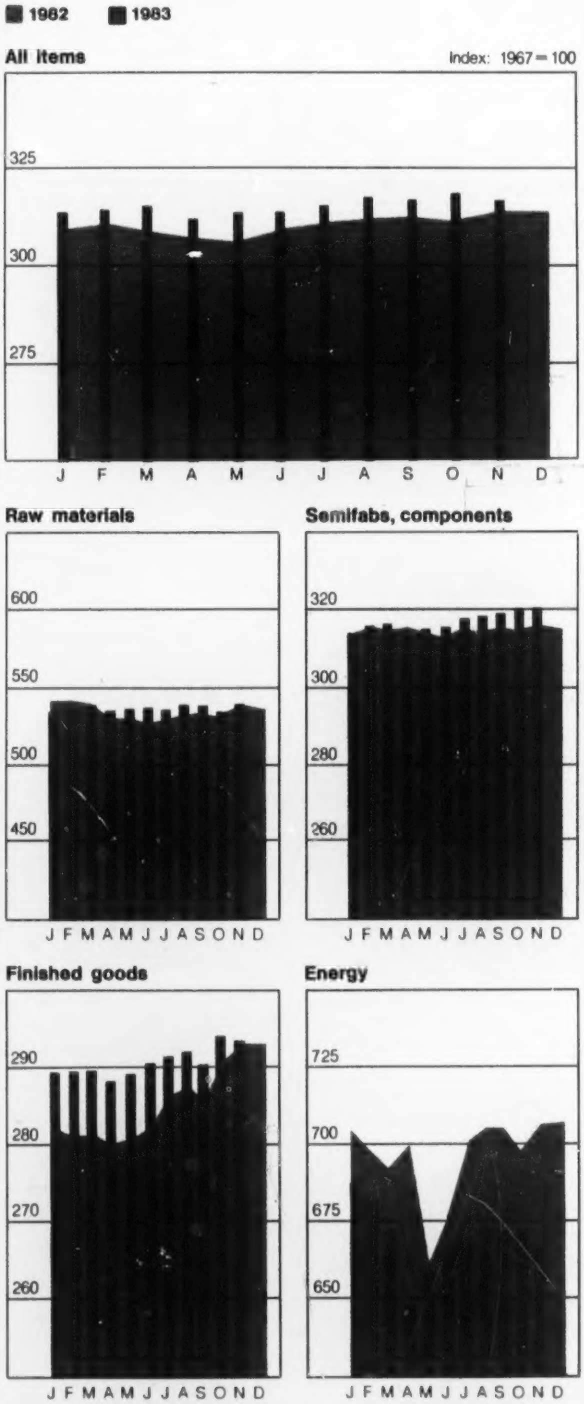
Capital equipment, meantime, shows a more mixed pattern. On the upside were commercial furniture, integrated and measuring instruments, motors and generators, and internal combustion engines. But these were effectively offset by declines in trucks, aircraft, farm machinery, transformers, and switchgear.

On the other hand, there were a few categories that seemed to have definitely

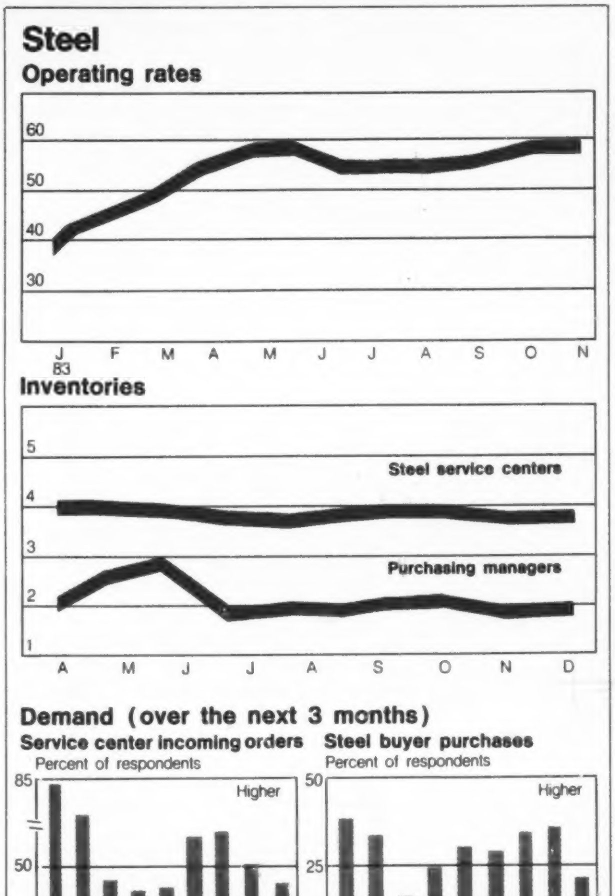
This month's breakdown

	Latest level (Oct)	% change from: Month ago	Year ago
Bearings	333.3	0.4	-0.6
Bolts, nuts, etc.	269.9	1.2	-0.1
Chemicals, inorganic	290.8	-0.5	-5.1
Chemicals, organic	373.2	-0.7	2.7
Concrete products	303.6	0.1	1.8
Corrugated cartons	248.5	1.3	3.7
Cutting tools, small	278.9	0.1	0.8
Electrical instruments	274.8	0.0	9.8
Electric lamps (bulbs)	327.3	0.1	10.3
Electronic components	187.0	0.5	5.9
Fans and blowers	335.8	0.0	-0.2
Foundry and forge products	352.8	0.1	1.9
Fuel oil (residual)	1200.7	0.6	5.4
Furniture, commercial	290.3	0.8	4.2
Gasoline	599.7	-2.1	-2.6
Glass, flat	230.1	0.3	2.1
Glass containers	351.0	0.0	-1.9
Gypsum products	313.9	3.2	23.1
Hand tools	350.4	1.2	1.2
Hand tools, power driven	221.0	0.2	-0.5
Industrial furnaces	368.3	0.4	3.3
Integrating and measuring instruments	224.6	0.4	5.2
Internal combustion engines	342.6	0.5	1.8
Lubricating oil	782.6	0.9	-7.6
Lumber millwork	308.2	0.4	10.0
Material handling equipment	285.8	-0.1	-0.1
Metal containers	338.2	0.0	2.8
Metal mill shapes (nonferrous)	310.7	-1.2	3.2
Metal tanks	305.2	0.0	-1.9
Motors and generators	335.8	0.5	6.9
Motor trucks (10,000 lb and under)	280.9	-0.7	2.5
Office and store equipment	154.8	-0.3	1.4
Paperboard	257.9	0.9	4.2
Paper boxes and shipping containers	251.8	0.7	1.5
Paper office supplies	227.4	0.0	0.3
Paint	264.4	0.1	-0.1
Plastic resins	296.6	-0.3	5.1
Precision measuring tools	244.4	0.1	1.5
Pumps and compressors	345.4	0.1	-0.8
Refractories	354.3	2.5	5.1
Rubber belts and belting	326.9	-1.1	1.9
Scales and balances	228.3	-1.8	0.3
Steel products	355.9	0.3	2.5
Switchgear	269.4	-0.4	1.9
Textiles, synthetic fibers	159.5	-0.6	-1.1
Textiles, gray fabrics	150.2	0.9	5.0
Tires and tubes	242.7	0.0	-4.6
Transformers and power regulators	222.9	-0.6	1.0
Welding equipment	272.5	-0.3	-2.2
Wire and cable	202.9	0.1	2.9

Industrial prices at a glance



Source: Bureau of Labor Statistics



Steel

Operating rates

Inventories

Demand (over the next 3 months)

Import prices (foreign vs. domestic)

Source: Steel Service Center Institute, NAPM Steel Buyers Committee

moved back into the plus column. Items included here are grey fabrics, paperboard, paper products, and a host of construction materials (including gypsum products, asphalt paving materials, asbestos cement shingles, refractories, and lumber millwork).

Government price officials, queried on the overall nearterm trend, say that some first-quarter acceleration in industrial prices seems likely. But they hasten to add that the increases are not expected to be all that earthshaking—with the aggregate index expected to rise by only about 1% over the next 3 months—or just 4% on an annualized basis.

STEEL SCENE

Optimism in steel markets

Look for more firming in most steel markets—with ***PW's*** regular monthly rundown suggesting these bullish demand signs:

- Producers are now talking in terms of a 77-78 million-ton shipment year in 1984—upwards of 10 million tons more than was shipped over the just-ended 12-month period.
- Steel buyers—limiting their forecast span to the next three months—are also on the optimistic side. Some 23% of metal-buying PMs responding to a new NAPM steel survey expect to increase their receipts over this time span—nearly three times as many as the small 8% who plan on reduced steel purchases.
- Steel service centers are even more enthusiastic—with the number of distributors expecting increased orders over the next three months topping those expecting decreases by a better-than-8:1 margin.

The optimism on the part of these warehouses may be part of the reason why Andrew G.Sharkey, the president of the Steel Service Center Institute (SSCI) is projecting another good year. He also points out that "there has been some stirring in the capital goods markets," which he feels may translate into increased business for service centers.

Aiding distributors, adds Sharkey, are the "new realities" of mill-customer relations—including stringent delivery demands as well as the need for close tolerance processing and quality control.

But while demand looks to remain strong, a tight rein is still being kept on steel inventories—both on the service center and buyer levels. Note from the accompanying chart, for example, that months' supply has remained relatively stable at low levels over recent months.

PROCUREMENT STATUS

Longer leads reported

Delivery stretchouts are now the order of the day.

True, these extensions are, for the most part, minor. But they do suggest that closer monitoring and expediting will be needed in the months immediately ahead—especially in such areas as electronics, where demand really seems to have taken off.

The new, tighter trend is perhaps best summarized by ***PW***'s exclusive leadtime index, which has moved up to 53 at latest report. That's three points above the neutral 50 mark and the biggest jump in several years.

Even more dramatic are the latest NAPM Business Survey Committee findings on vendor delivery performance. Roughly one out of every three respondents now report some slowdown (the highest such number in nearly 3.5 years)—and only 1% note a speedup (the lowest such number in 5 years).

But as suggested above, very few items (except for selected electronic components) are actually reported as being in extreme short supply. And even here, some relief is anticipated by late spring or summer as demand flattens out a bit and previously shutdown facilities are reactivated.

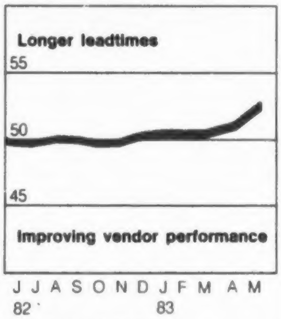
Another reassuring note: The average factory utilization rate for all manufactured goods is still only in the 80% range—well under levels most of these vendors prefer to operate.

In any event, while the current delays are creating some annoyances, no one seems ready to push the panic button. Thus only about 17% of queried PMs say they're ordering 90 days or more in advance—a number virtually unchanged from the previous two months.

Monthly procurement status report

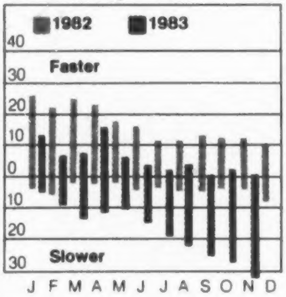
Leadtime index

A 'diffusion' index based on 158 key commodities. Above '50' indicates a tendency for leadtimes to stretch out. Below '50' suggests improving vendor performance.

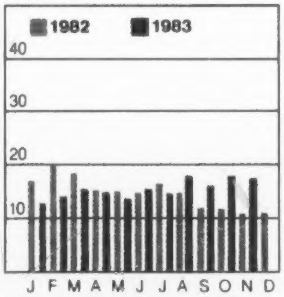


Delivery performance

Percent reporting deliveries

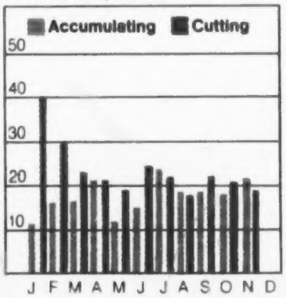


Forward commitments



Inventory strategy

Percent of respondents



Source: NAPM

Also attesting to the fact that things are basically under control is the fact that there's apparently very little inventory hedging. True, there are now more people adding to stocks than are paring. But the gap is narrow—and on average the increases are just barely keeping up with increased production activity.

Indeed, if replies from both groups are to be taken at face value, inventory-sales levels may actually decline a bit. Now, 28% of the buyers still consider their steel stocks as being too high (versus not one who feels that they're too low)—with comparable figures on the service center level being 25% too high and only 3% too low.

But interestingly enough, service centers are not planning on any stock reduction—with the 27% contemplating reductions over the next three months completely balanced out by a like percentage figure projecting increases.

One reason for this could be the growing snugness in some product lines. While still few in number, some steel service centers voice scattered concern over cold-rolled sheet and stainless. Interestingly enough, the same products are listed as areas of concern by steel buyers.

Another trend that may be in the making: fewer really good overseas bargains. This is especially true in stainless, where only 22% of the respondents report price breaks of 10% or more—sharply under the 75% high noted just last summer.

Buyers, who don't split out stainless from carbon steel, tell much the same story. Only 3% now say foreign suppliers are offering steel "substantially under" comparable domestic levels—again well under the 20% peak of last year.

Yet curiously enough, both groups indicate that they may be more dependent on foreign steel in the months ahead. One reason could be the need for bigger tonnages—plus some possible concern about supplies and the need to line up a few extra suppliers.

Leadtimes and availability

Chicago: Electrical supplies have stretched out a week (to 2-3). Ditto, regular motors (to 1-2). And while other MRO items are steady, they, too, could move out another 2-3 weeks. Elsewhere, some semiconductors remain on allocation. Other stretchouts (to these weekly waits): polyethylene (6), and film laminations (8-12).

Cleveland: Extending a bit to these new weekly levels are cold finished aluminum (12), and maintenance paint (2-3). Other typical waits: corrugated (3), 2-ply fiber drums (2), polyethylene and PVC resins (2-3), lumber (3), plastic shrink film (3), alloying materials (on demand), glassine papers (4-5).

Los Angeles: The overall trend is toward modest stretchout—with a sampling suggesting these weekly waits: galvanized steel (10-12), grey iron castings (7-9), brass castings (6-8), insulation material (7), specialty wire (4-6), fasteners (3-5), stainless steel (14), semiconductors (22-32), and printed circuit boards (10).

BUSINESS DATATRAK

Houston A rising rig count suggests some future stretchout in oil field equipment. Other currently unchanged leads (in weeks): mill steel (4), forgings (4-6), chemicals (0-1), MRO supplies (3), electric and electronic components (8), engine parts (0-1), air compressors (4-6), valves and fittings (0-1).

Philadelphia New longer waits for carbide tools (12-14)—with stretchouts anticipated for other tool items, too. Also out are aluminum bar, sheet, and extrusions (4-6), stainless tubing (6-8), with plastic sheet (though unchanged) expected to move out. Coming in are standard taps (4), and standard polishing wheels (2-4).

Pittsburgh: Some extensions in metals—with magnesium out to 6 weeks (but only temporarily) and zinc also out to 6 weeks. Polyethylene and PVC are out a week (to 5). Other waits (unchanged): coil coating paint (4), steel strapping (2-3), corrugated and folding boxes (3-4), and plastic bags (3-4).

Leadtimes (in weeks)

	Now	Month ago	Six months ago
STEEL			
Sheet (Phil)	7	7	7
C-R Sheet (Chgo)	10	10	8½
Plate (Phil)	6	6	4½
Plate (Chgo)	3	3	2½
Reinforced (Hous)	6	6	6
H-R Bars (Phil)	4½	4½	4½
H-R Bars (Chgo)	2½	2½	2½
Cold-Drawn Bars (Phil)	4½	4½	4½
Galvanized (LA)	11	11	4
Galvanized (Chgo)	7	7	7
Structurals (Chgo)	2½	2½	2½
Structurals (Hous)	17	17	17
Tubing (Phil)	7	6	6
Grey Iron Castings(LA)	8	6½	12
Steel Castings (Hous)	11½	11½	11½
Forgings (Hous)	7	7	7
Pipe, Carbon (Hous)	13	13	13
ELECTRIC & ELECTRONIC			
Cables (Chgo)	8½	8½	8½
Capacitors (Chgo)	14	14	13
Circuit Breakers (Chgo)	6	6	6
Electromech. Devices (LA)	7	9	8
ICs (Linear) (Phil)	11	11	11
Motors (Phil)	21	21	21
Motors, 1000 hp & Up (Hous)	39	39	39
Printed Circuit Boards (Chgo)	10½	10½	7
Relays (Chgo)	15	15	15
Resistors (Chgo)	10	10	10
Resistors, Wirebound (Phil)	9	9	10
Transformers (Chgo)	10	10	10
LUMBER			
Hardwood (Pgh)	3	3	3
Hardwood (Clev)	3½	3½	3½
Plywood (Chgo)	2	2	2½
Plywood (Phil)	1½	1½	1½
Softwood (Clev)	3	3	3
Softwood (Phil)	1/5	1/5	1/5
Softwood (Pgh)	3	3	3
Particleboard (Phil)	2½	2½	2½
CHEMICALS-PLASTICS			
Adhesives (LA)	½	½	½
Naphthalene (Chgo)	2	2	2
Paint (LA)	4	4	4½
Paint, Coil Coating (Pgh)	4	4	4
Paint, Maint. (Clev)	2½	2	2
Polyester Resin (LA)	2	2	2
Polyethylene Resin (Clev)	2½	2½	2
Polyethylene Resin (Pgh)	4	4	4
PVC Resin (Chgo)	2½	2½	2
PVC Resin (Pgh)	4	4	4
Titanium Dioxide (LA)	1	1	1
PACKAGING			
Bags, Kraft (Pgh)	5	5	5
Bags, Multiwall (Clev)	9	9	9
Bags, Multiwall (Pgh)	6	6	6
Cartons, Corrugated (Clev)	3	3	3
Cartons, Corrugated (Hous)	3	3	3
Cartons, Folding (Phil)	6½	6½	6½
Cartons, Folding (Pgh)	3½	3½	3½
Cellophane Wrap (Phil)	5	5	5
Plastic Bags (Pgh)	3½	3½	3½
Plastic Pkg. (Pgh)	3	3	3
Shrink Film (Chgo)	4	4	4
Shrink Film (Clev)	3	3	3
Drums, Fiber (Pgh)	1	1	1
Drums, Steel, Std. (Pgh)	1	1	1
Wood Pallets (Chgo)	2½	2½	2½
Wirebound Boxes (Pgh)	4½	4½	4½
Strapping (Clev)	2½	2½	2½
Strapping (Pgh)	3	3	3
PAPER			
Fiberboard (Clev)	3½	3½	3½
Glassine (Clev)	4½	4½	4½
Glassine (Pgh)	5½	5½	5½
Groundwood (Clev)	4½	4½	4½
Groundwood (Pgh)	7	7	7
Kraft (Clev)	1	1	1
Kraft, Bleached (Clev)	1	1	1
Kraft, Bleached (Pgh)	5	5	5
Kraft, Natural MFNS (Clev)	1	1	1
Laminated (Clev)	8	8	8
Tissue (Pgh)	5½	5½	5½
NON-FERROUS			
Aluminum Coil (Chgo)	11	11	11
Aluminum Plate (Chgo)	9	9	9
Aluminum Sheet (LA)	4½	4½	5½
Aluminum Sheet (Chgo)	14	14	11
Brass Castings (LA)	7	7	8½
Brass Rods (Chgo)	3½	3½	3½
Brass Sheet (Chgo)	9	8	5½
Brass Tube (Chgo)	9	9	5
Copper Fittings (LA)	5	5	5½
Copper Mill Prod. (Pgh)	6	6	6
Copper Tube (LA)	5	5	6½
Copper Tube (Phil)	6	6	6
Lead (Pgh)	2	2	2
Magnesium (Pgh)	6	2	2
Manganese (Clev)	1	1	1
Nickel (Clev)	1	1	1
Nickel (Pgh)	2	2	2
Silicon (Clev)	1	1	1
Tin (Pgh)	3	3	3
Wire, Specialty (LA)	5	5	5
Zinc (Pgh)	2	2	2
MISCELLANEOUS			
Bearings, Domestic (Phil)	12	12	12
Bearings, Foreign (Phil)	26	26	26
Boilers & Furnaces (Hous)	35	35	35
Compressors, Centrifugal (Hous)	52	52	52
Compressors, Reciproc. (Hous)	39	39	39
Fasteners (Chgo)	½	½	½
Fasteners (LA)	4	4	4
Fasteners, Std. (Phil)	2	2	3½
Heat Exchangers, Carbon-alloy Steel (Hous)	20	20	30
Heat Exchangers, Hi-pressure (Hous)	21	21	43
Insulation Mat'l. (LA)	7	7	9
Machined Parts (Hous)	9	9	9
Pipes & Valves (Chgo)	1	1	1
Pumps (Hous)	39	39	41
Pumps (LA)	9	9	10
Rubber, Synthetic (LA)	2	2	2
Rubber Hose (LA)	4	4	6
Tungsten Carbide Parts (Hous)	15	15	15
Valves, Cast Steel (Hous)	8	8	8
Welding Supplies (Hous)	5	5	5

BUSINESS DATATRAK

Raw material price barometer

Latest month	**279.6**
Month before	**273.4**
Year ago	**230.4**

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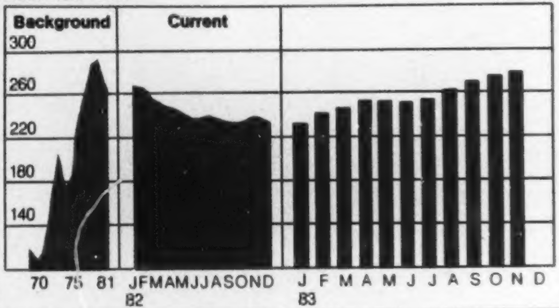


Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	347.00	347.00	347.00
Steel, structural shapes, Pitts., cwt.	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt.	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt.	24.40	24.40	24.40
Steel, bars, dlvd. Phila., cwt., merchant quality	17.50	17.50	14.35
Steel, bars, Pitts, cwt.	17.5	17.5	14.35
Steel, bars, C.R., Pitts, cwt.	26.00	26.00	31.00
Steel, plates, Pitts., cwt.	23.25	25.75	24.25
Steel, plates, H.R., Pitts., cwt.	23.25	25.75	24.25
Steel, sheets, C.R., Detroit, cwt.	26.15	26.15	24.65
Steel, strip, C.R., Chi., cwt.	35.30	35.30	29.05
Steel, basic wire, Pitts., cwt.	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	0.750	0.740	0.450
Antimony, in alloy, lb.	2.00	2.00	2.00
Beryllium-copper, cost ingot, lb.	4.95	4.95	4.95
Brass, red, 85%, [sheet], lb.	1.22	1.19	1.19
Brass, yellow, [sheet], lb.	1.17	1.14	1.13
Cadmium, ton lots, lb.	1.25	1.25	1.00
Copper, electrolytic, wire bars, refd., lb.	0.68	0.65	0.72
Copper sheet, over 24 in., lb.	1.31	1.28	1.28
Lead, common, N.Y., lb.	0.25	0.25	.205
Magnesium, pig ingot, [99.8%], lb.	1.38	1.38	1.34
Mercury, 20 fl. lots, N.Y., fl.	390.00	378.00	414.00
Molybdenum Climax Oxide/bags, lb.	4.65	4.65	4.40
Nickel, electrolytic, producer, lb.	3.20	3.20	3.20
Platinum, producer, oz.	475.00	475.00	475.00
Silver, N.Y., oz.	9.35	8.92	10.35
Tin, Straights, N.Y., lb.	6.30	6.52	6.13
Zinc, Prime West, East St. Louis, lb.	0.49	0.49	0.38
Zinc, die casting alloy, No. 3, lb.	0.555	0.555	0.465
PAPER			
Uncoated book 13 offset, ton	760.00	760.00	800.00
Watermarked bond, ton	915.00	915.00	845.00
Gummed sealing tape, carton	15.45	15.41	15.70
Boxboard, mach. clay ctd. recycled sheets 80 bright, .016, ton	475.00	475.00	475.00
Wrapping paper, std. distribution cost, kraft, basis wt. 50 lb., roll	28.00	28.00	28.00
Kraft linerboard, 42 lb., unbleached, ton	290.00	290.00	250.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd.	0.317	0.289	0.243
Cotton drill, 1.85, 59", 68x49, N.Y., yd.	1.02	1.02	0.95
Cotton middling, 1", N.Y., lb.	0.716	0.731	0.615
Printcloth, 48", 80x80, N.Y., spot. yd.	0.850	0.855	0.610
Army duck, 37", 13 oz., yd.	1.69	1.69	1.00
Blended printcloth, 64", 78x54, yd.	0.74	0.74	0.65
20s combed yarns	1.70	1.70	1.88
Wool tops, N.Y., lb.	3.60	3.60	3.60
CHEMICALS			
Acrylonitrile, tanks, lb.	0.43	0.43	0.46
Ammonia, anhydrous, fertilizer, wholesale, tanks, ton	195.00	195.00	210.00
Benzene, petroleum, tanks, Houston, gal.	1.45	1.47	1.48
Caustic soda, 76% solid, drums, carlots, cwt.	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb.	0.58	0.58	0.66
Formaldehyde, USP, 37%, [12% to 15% meth.], tanks, lb.	0.106	0.106	0.101
Glycerine, synthetic, tanks, lb.	0.730	0.730	0.725
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	0.450	0.450	0.715
Naphthalene, crude, tanks, lb.	0.22	0.22	0.22
Phthalic anhydride, tanks, lb.	0.305	0.305	0.310
Polyethylene resin, low density liner film grade (market price), lb.	.420	.380	.275
Polypropylene, homopolymer grade (market price), lb.	0.42	0.40	0.37
Polystyrene, general purpose grade (market price) lb.	0.40	0.40	0.38
Shellac, bone dry, N.Y., lb.	1.65	1.65	1.65
Soda ash, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	0.350	0.350	0.335
Sulphur, crude, ex-terminal, Tampa, Fla., lt.	132.50	132.50	135.00
Sulphuric acid, 66%, commercial, tanks, ton	56.35	56.35	56.85
Titanium dioxide, anatase, reg., carlots lb.	0.69	0.69	0.69
Xylene tanks, gal.	1.35	1.33	1.45
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	318.25	327.35	292.45
Lumber 2x2, pine, mbf, cl	313.50	324.70	277.50
Plywood, plyform, 3/4", msf, cl	546.35	551.35	551.80
Plywood, 5/8", msf, cl	355.25	366.45	334.25
Cement, bulk, ton, tl	61.88	61.88	62.02
Sand, ton, cl	5.99	5.99	5.88
Ready-mix concrete, 3,000 psi/cu. yd., 15 cu. yd.	45.64	45.64	45.68
Crushed stone, 1½", ton, cl	8.01	8.00	7.77
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.76	0.76	0.76
Gypsum sheathing, ½"x1"x8", msf, tl	181.57	172.93	156.82
Brick, common, per thousand, tl	171.33	174.35	172.95
Asphalt paving, AC-20	158.71	158.71	156.77
Concrete sewer pipe, 12", prem. joint, per foot, cl	6.80	6.80	6.61
FUELS			
Fuel oil, No. 6 or Bunker C, Gulf., bbl.	24.40	25.25	23.25
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	30.75	30.50	31.50
Gasoline, 91 oct., reg., Los Angeles, rack, gal.	0.820	0.780	0.845
Gasoline, 94 oct., reg., Chi., tank car, gal.	0.770	0.833	0.894
Heating oil, No. 2, Chi., bulk, gal.	0.785	0.828	0.870
Heating oil, No. 2, N.Y., bulk, gal.	0.94	1.03	1.01
Heavy fuel, PS 400, Los Angeles, rack, bbl.	26.25	26.25	26.15
Jet kerosene, gal.	0.780	0.815	0.870
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	0.46	0.49	0.53
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	90.00	85.00	51.00
Steel, No. 1, hvy., dlvd., Chi., ton	83.00	77.00	44.00
Copper, No. 1, East, wholesale buy, dlvd., lb.	0.605	0.575	0.565
Copper, No. 2, East, wholesale buy, dlvd., lb.	0.510	0.475	0.505
Brass, red, East, wholesale buy, dlvd., lb.	0.565	0.535	0.525
Brass, yellow, East, wholesale buy, dlvd., lb.	0.32	0.33	0.33
Alum., old sheet/cast, E., wholesale buy, dlvd., lb.	0.45	0.45	0.22
Alum., mixed clip., E., wholesale buy, dlvd., lb.	0.475	0.475	0.230
Zinc, old, East, wholesale buy, dlvd., lb.	0.190	0.190	0.080
Lead, clean solids, East, wholesale buy, dlvd., lb.	0.15	0.14	0.11
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	25.00	25.00	5.00
Paper, old corrug. box, dlr., N.Y., ton	21.00	20.00	4.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb.	0.105	0.100	0.130
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb.	0.33	0.33	n.a.

[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]

It appears from estimates of income and purchases that the personal savings rate may increase—but not nearly to this so-called normal level. Best bet for 1984: a rate somewhere around 5.3%. But that rate would still be below the level needed to assure enough money for the financing of prospective business capital programs and housing.

The budget deficit: Concern is widespread that huge federal deficits (current and projected) could abort the recovery—if not in 1984, then sometime shortly thereafter. This view can't be dismissed easily—especially since increases in internal funds generated by businesses may slow down in the latter part of 1984 (at a time business capital spending is expanding). It suggests that private borrowing will be rising at the same time Washington's cash needs are also expanding.

A credit crunch could develop, putting upward pressure on interest rates in late 1984 and early 1985. Or if the Fed eased up, it could mean an accelerated inflation pace. In either case, it would not bode well for the economy. The red ink budget figures are now at astronomical proportions. In fiscal 1983 (on a national income account basis), the deficit is put at $187 billion. And for fiscal 1984 it could rise to nearly $200 billion.

Trade deficit: Deficits are plaguing our international transactions. The U.S. merchandise trade balance fell an additional $23 billion into the red in the past year, reaching $55 billion.

This situation reflects both dwindling exports (off $8 billion in 1983—to only $204 billion) and rising imports (up $15 billion—to $259 billion). Blame it on a strong dollar and the faster-than-rest-of-world U.S. recovery, which has tended to beef up imports and put a lid on exports.

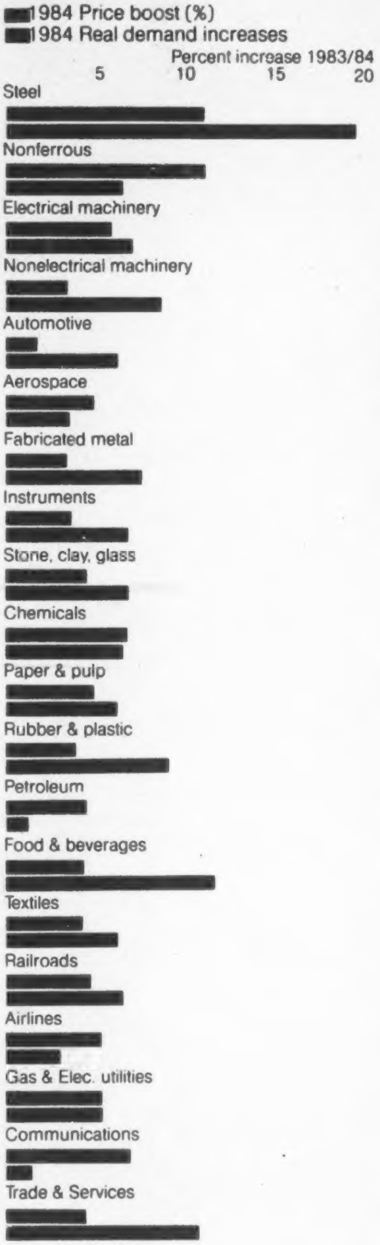
These trends are likely to continue through 1984. The trade deficit may climb to the $70 billion range. Reasons are the same as in 1983: a continuing strong dollar, (2) an expanding U.S. economy, and (3) still-less-than-sensational growth in overseas economies.

Advice to PMs: Despite all of these problems, Paradiso is confident that on balance 1984 will be a good year for most firms. Two notes of caution: (1) the first half will rack up bigger advances than the second half and (2) industry-by-industry gains will be uneven. Forecasting individual demand, supply, and price trends won't be all that easy. Paradiso's advice: "Fine tune current forecasting methodology—with added efforts to break figures down into more meaningful subgroups."

Inventories will bear exceptionally close watching. Stockouts will continue to be a threat. And some further leadtime extensions seem inevitable. On the other hand, high interest rates and some demand deceleration later on in the year will put a premium on keeping stocks as low as possible.

The delicate balancing act implied by these opposing forces puts the emphasis on flexibility. In Paradiso's words: "Update forecasts at least once a quarter—maybe even more often—and be ready to make mid-course corrections in a year that might hold more than the usual number of surprises."

Forecast 84: A view from the executive suite



Source McGraw-Hill

Great expectations!

Most participants in an NAPM survey predict improvement in the 1984 economy.

Purchasing executives are looking at the economy through rose-colored glasses. Some longterm concerns are being expressed about price increases and high interest rates. But the overwhelming majority responding to the National Association of Purchasing Management Business Survey Committee's annual forecast questionnaire are convinced that these problems won't be enough to upset the 1984 applecart.

Optimism about the next 12 months is typified by the fact that an eye-opening 86% of the survey respondents expect 1984 to be better than 1983. A miniscule 5% fear that things could get worse.

Contrast those findings to last year when the recovery was just about to get under way. At that time, the comparable figures were 59% "better" and 11% "worse."

Viewed from another perspective, optimists now outnumber pessimists by a 17:1 margin. The 86% voting for further gains represent the highest level since this question was first asked in 1957.

Price trends: This better demand will mean some acceleration in the inflation rate over the next six months. Some 85% now anticipate price increases in this time span—nearly three times the 29% who felt this way a year ago.

On the other hand, few seem ready to push the panic button. In the words of Charles T. Haffey, vice president of purchases for Pfizer and chairman of the NAPM committee, "the acceleration will be moderate."

And he backs this viewpoint with further survey findings. Haffey notes that (1) only 3% of the respondents see the price advances as severe, and (2) more than three quarters feel they'll be selective rather than across the board.

The Pfizer executive also doesn't think the acceleration will go on indefinitely. Citing comments by respondents, Haffey says his gut feeling is that the second half won't be that much different from the first half of the year as far as overall price boosts are concerned.

Operating rates: More than two-thirds of the responding firms still are operating in the 50-89% capacity utilization range. Another 7% are under the 50% level. True, rates are substantially higher than they were last year at this time. But, as Haffey puts it, "There is still some overall underutilization if you compare current readings to the averages of the past few decades."

Capital expenditures: PMs are surprisingly optimistic here. Nearly half are expecting increases in 1984—more than three times the 15% who expect their firms to cut back on plant and equipment spending during the next 12 months.

Inventories: Although no specific survey question was asked, the overall tone of the comments suggests that inventories—though undoubtedly going up in tonnage terms—will remain trim relative to production and sales. Haffey cites these reasons for the continuing caution: (1) ample supplies, (2) absorption of the Japanese lesson that it's possible to live on less, and (3) continued high interest rates.

And while the NAPM spokesman doesn't rule out a trend away from hand-to-mouth buying, he does not see any return to the 3-4 months protection of the early 1970s—despite a gradual stretchout in leadtimes.

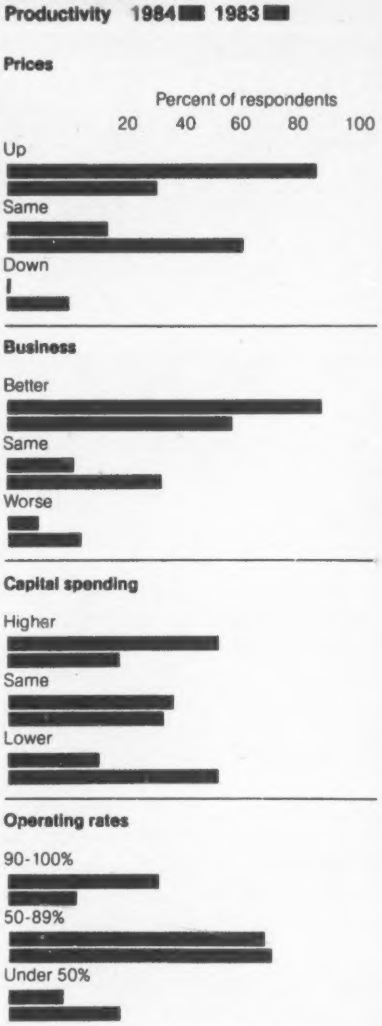
The year as a whole: Although few are worried about availability, many survey participants express concern about the huge federal deficit and accompanying high interest rates. Haffey, for example, feels it could eventually slow down the recovery.

Responding PMs seem to agree. The 77% who see increases in the economy over the first six months of the year (compared to the previous six months), dwindle down to 56% when the second half 1984 is rated against the first half of 1984.

Zero in on the year as a whole, and buyer attitudes can only be described as extremely positive. Over this relatively short time span, some 68% say they are basically optimistic—far outweighing the 9% who say they are worried or pessimistic.

In Haffey's words: "Not since 1978 have so many members of the committee been enthused about the coming year."

What a difference a year makes—NAPM views now vs. a year ago



Source: NAPM Business Survey Committees

Few big gains in prices

Double-digit increases next year will be few and far between, according to Data Resources, Inc.

Evidence is mounting that the current expansion won't be accompanied by the wage-price inflation spiral that has marked the last two business recoveries. At least that's how DRI, preparing its latest quarterly cost-price outlook, sees things developing. Their forecast calls for industrial commodities (which exclude farm and food products) to rise 5.2% in 1984 and 6.7% over the following year. Considering the strong GNP growth gains anticipated over the period, the figures aren't bad.

Analysts at the Lexington, MA-based econometric consulting firm don't rule out a few double-digit increases along the way. But they hasten to add that such gains will be few and far between. Some product-by-product trends (see accompanying table for a more complete rundown) are projected along these lines:

Steel: More price increases are coming in the next two-three quarters. Producers are expected to use increased demand from the capital goods sector as justification for passing through increases in scrap, ore, energy, and labor costs. Look for the overall mill price index to rise 7.0 in 1984 and at about a 7.4% rate during the subsequent year (1985).

Nonferrous metals: Despite some slowdown in consumer goods, capital goods orders are on the upswing, thus maintaining the positive momentum of the aluminum industry while providing a much needed boost to copper and nickel. The aggregate nonferrous metals price index should show a strong 10.1% compound annual growth rate over the nearterm forecast horizon (third quarter 1983 to fourth quarter 1985)—with more robust increases occuring over the next four quarters.

Chemicals: Despite overall improvement, worldwide excess capacity and relatively weak energy input cost pressures will serve to restrain chemical price escalation through the near term. The aggregate industrial chemicals price index is projected to rise only 5.9% in 1984 and 4.7% in 1985.

Electrical machinery: Forecasts call for annual increases of 4.8% in 1984 and 6.3% in 1985. These moderate increases compare to average annual jumps of 9.0% in the 1980-82 interval.

Construction machinery: Prices will move up by spring as increased construction (especially repairs of roads and bridges and other nonbuilding construction projects) increases demand for machinery. Look for annual increases of 5.0% and 7.7% in 1984 and 1985, respectively.

Prices—Now through 1985

(Comparison of fourth quarter pricing)

Price Increase (%)	**1983/82**	**1984/83**	**1985/84**
Raw materials, energy			
Industrial chemicals	1.9	5.6	4.6
Construction material averages	4.0	7.2	7.4
Processed fuels & lubricants	-1.9	4.1	6.4
Middle distillates	-13.2	5.6	6.4
Metals			
Machine shop products	5.1	7.6	10.2
Steel, carbon plates	5.0	8.4	7.9
Stainless plates	0.3	7.8	5.6
Mill shapes	4.2	13.9	9.0
Copper wirebar (domestic)	11.5	13.2	8.8
Structural metal products	-2.4	6.5	9.8
Components			
Batteries (primary)	-4.0	7.3	6.1
Electronic components	5.3	2.6	3.8
Hardware	2.9	6.3	4.9
Abrasive products	2.6	3.9	7.8
Fasteners	-1.1	6.1	10.6
Corrugated cartons	1.8	3.6	5.1
Truck tires	-4.1	7.2	5.9
Valves & fittings	1.0	7.6	7.8
Construction supplies			
Insulation board	3.4	5.1	5.7
Plastic constr. products	13.9	4.4	1.2
Bituminous paving mat'l	2.4	6.4	10.4
Sand, gravel, stone	2.1	4.0	10.4
Culvert pipe, reinforced	2.3	7.9	12.3
Machinery			
Construction equipment	2.3	6.6	8.2
Heating equipment	3.3	5.5	6.2
Railroad equipment	2.8	8.8	10.2
Mining machinery	0.8	4.4	10.6
Oil field machinery	-2.2	6.4	8.5
Trucks	-3.8	8.0	7.1
Metalworking equipment	1.9	8.0	8.3
Switchgear, switchboards, etc.	2.3	6.0	7.1

Note: Selected from more than 200 wage and price forecasts.
Source: Data Resources Inc., Cost Forecasting Service

Solid growth in '84 economy

Despite significant industry variations, corporate leaders see healthy gains for this year.

Corporate bigwigs are bullish on Ameria—at least as far as the next 12 months are concerned. Not only do they see a fair-sized jump in both sales and capital spending, but they are also betting that price boosts will remain relatively low. The new estimates, based on a just-completed McGraw-Hill survey, can be summarized along these lines:

Price trends: The average price increase in 1984 is expected to be about 4.5%. But there could be some significant industry-by-industry variations (see chart). While double-digit (10-11%) increases are anticipated for steel and nonferrous metals, some other key subgroups such as automotive, fabricated metals, and instruments will show advances only in the 2-3% range.

Demand trends: The average corporate response suggests a strong 7%-plus gain. Again there will be substantial industry differences. The previously depressed steel industry is expected to boost tonnage by as much as 20%, in sharp contrast to petroleum products where continuing conservation will keep the 1984 gain down to near 1%.

Capital spending plans: Dollar averages will grow 9.4%. But if estimates for a 5.8% plant and equipment price increase are correct, the real gain will be somewhat smaller—3.4% to be exact. That's a big improvement over the past year (1983) when real capital spending declined by an estimated 2.5%.

Positive signs: Two developments could make 1984 better than the survey replies would seem to indicate. One is that with capital goods inflation running very low at the current time, prices may rise only 2-3%. Coupled with a 9.4% increase in earmarked dollar outlays, it would make for a healthy 6-7% increase in real spending.

And there is the distinct possibility that the survey may be undershooting the dollar outlay mark. This situation often happens when the economy is in a solid uptrend after a recession. In 1972, for example, the survey projected a 6.9% increase in new plant and equipment outlays. Yet when the dust finally settled, the increase was a more robust 10.7%. In 1977, when the survey estimated a 13% advance, the final figure was 15.5%.

But corporations will not have unlimited funds to spend. There are financial restraints. Balance sheets are improving. But they are still heavily weighed down with debt—particularly short-term debt. Interest payments still take up too much of the typical firm's cash flow. And though interest payments are declining, interest rates remain extremely high.

Implication: Proposed capital projects will have to promise a very healthy rate of return to justify borrowing longterm money at 12% or more.

More price indicators: A few additional words are in order on the projected price increases. For the most part, they are relatively moderate compared to the boosts that occurred during other recent business recoveries.

And the double-digit boosts anticiated for metals only represent a partial recovery from the huge declines of 1982 and early 1983. The point to keep in mind here: Even if these projected metal price hikes materialize, tags in most metal areas will still be significantly under their pre-recession peaks.

Another positive price omen: The growing percentage of capital spending being earmarked for automation and cost cutting. Last year 16.5% of the capital dollar in the manufacturing sector went for this kind of equipment. This year the figure will grow to 17.5%—and by next year it should be well over 18%.

Bright year ahead

Computer forecasters provide good news on the economic growth and price fronts.

The big econometric forecasting models are backing up what most purchasing managers, top sales executves, and business analysts are saying: That 1984 will be a darn good year—with (1) average annual growth actually topping 1983 rates and (2) price boosts still remaining in the relatively modest range.

A look at the accompanying summary table (a compendium of four of the nation's most prestigious models) suggests that things are looking better than previously anticipated.

Six months ago, for example, the 1984 real GNP increase (4-model average) was put at 4.8%. Now the figure has been revised upwards to 5.5%.

The same good news for price acceleration. The 1984 average increase in the GNP price deflator (the broadest gauge of all price yardsticks) is now put at 4.7%—significantly under the 6-month-ago estimate of 5.1%.

Look at producer prices, and the situation is similar. Specifically, the current 1984 projection, calling for a 5.0% increase, is somewhat below the 5.7% estimate made just six months earlier.

It's only when you get to consumer prices that some upward adjustment appears. The probable reason: higher food prices engendered by last summer's drought which occurred after the earlier forecast had been made.

What makes all these forecasts so believeable is that the four models—

Comparing econometric forecasts

Real GNP (% change)	'83	'84	'85
DRI	3.4	5.4	3.2
Chase	3.4	5.4	2.9
Wharton	3.5	5.9	3.7
Merrill Lynch	3.5	5.4	N.A.
Average		5.5	3.3
Industrial production (% change)	**'83**	**'84**	**'85**
DRI	6.5	9.9	3.8
Chase	6.5	9.8	3.8
Wharton	6.5	10.5	4.8
Merrill Lynch	6.5	9.4	N.A.
Average		9.9	4.1
GNP price deflator (% change)	**'83**	**'84**	**'85**
DRI	4.2	4.7	4.8
Chase	4.2	4.8	6.3
Wharton	4.2	4.6	5.5
Merrill Lynch	4.2	4.8	N.A.
Average		4.7	5.5
Producer prices (% change)	**'83**	**'84**	**'85**
DRI	1.4	4.9	5.1
Chase	1.4	5.1	6.9
Wharton	1.4	4.6	5.8
Merrill Lynch	1.5	5.5	N.A.
Average		5.0	5.9
Consumer prices (% change)	**'83**	**'84**	**'85**
DRI	3.2	4.9	4.8
Chase	3.3	5.2	6.2
Wharton	3.2	4.8	5.6
Merrill Lynch	3.2	5.3	N.A.
Average		5.1	5.5
Prime interest rate (%)	**'83**	**'84**	**'85**
DRI	10.8	10.3	10.8
Chase	10.8	11.0	12.5
Wharton	10.8	11.2	12.4
Merrill Lynch	10.7	10.8	N.A.
Average		10.8	11.9
Unemployment rate (%)	**'83**	**'84**	**'85**
DRI	9.7	8.2	7.9
Chase	9.6	8.3	7.9
Wharton	9.7	8.4	7.6
Merrill Lynch	9.7	8.4	N.A.
Average		8.3	7.8

which traditionally tend to differ among themselves—are pretty much in agreement this time around. In fact, there's less than half a percentage point difference between low and high 1984 GNP forecasts (5.4% versus 5.9%).

This surprising agreement also spills over into the price sphere. The range in 1984 GNP price deflator forecasts is actually less than that for real GNP—with only 0.2 percentage points separating the 4.6% low from the 4.8% high. Consumer prices show an almost-as-small 1984 spread—as forecasts vary only from 4.8% to 5.3%.

In the more volatile producer price sector, the models begin to show significant variation. The projected 1984 increases here, for example, vary from a low of 4.6% to a high of 5.5%. On the other hand, even this variation isn't all that great compared to differences of opinion noted in previous years.

But what about 1985? The models all seem to be pretty much in agreement here—suggesting some meaningful shifts in the overall business climate. All four, for example, indicate substantially smaller real GNP and industrial production gains.

The declines, according to model spokesmen, reflect both (1) the aging of the recovery which by then will be entering its third year and (2) new increases in already-high interest rates. The prime lending rate at that time, for instance, is expected to average in the 11-12.5% range—up about 1% from average 1984 levels and high enough to put a damper on both construction and marginal capital spending plans.

Some further modest price acceleration is also suggested for 1985. But again the accent should be on the word "modest." Keeping increases within bounds at that time will be (1) easing demand pressures, as gains in both real GNP and industrial production decelerate, and (2) relatively restrained labor cost pressures engendered by an unemployment rate that will be hard put to drop much under the 8% mark.

Buyers accent the positive

The outlook from our readers is optimistic. Meanwhile, they are keeping an eye on prices and leadtimes.

It's beginning to look more and more like another good year. That's the response from the vast majority of *PW* readers participating in our latest nationwide outlook survey. Prices will be rising at a somewhat faster rate than over the past year, and leadtimes are beginning to extend. But for the most part, purchasing executives say the problems will be manageable.

As one Pennsylvania-based buyer puts it, "Increases in industrial tags should remain within bounds. And while delivery times will almost certainly stretch, it's a small price to pay for what seems to be shaping up—at least for our company—as the best year since 1979."

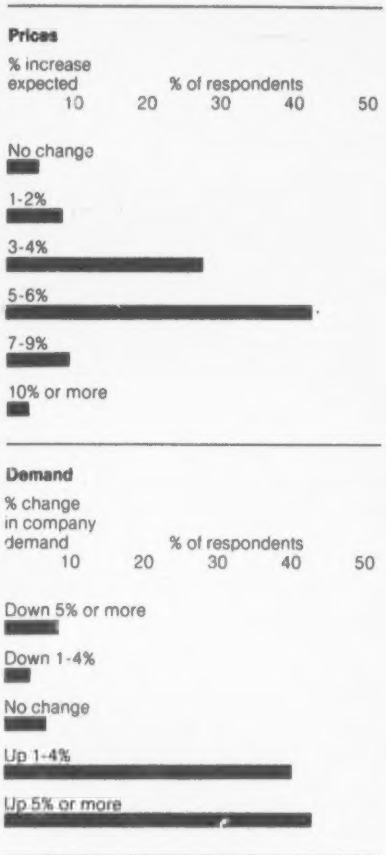
And he's not alone in this appraisal. The survey results paint this basically bullish picture for the 12 months immediately ahead:

1984 price boosts: The average increase is put at just under 5%—with nearly three out of every four respondents estimating their 1984 increase in the 3-6% range. Equally significant, only a miniscule 2% see boosts rising at a double-digit pace.

Prices—1984 versus 1983: Some 83% of the respondents see some acceleration as unavoidable. The overwhelming majority feel the speedup will be quite modest. But the acceleration should be more pronounced by the second half (nearly four out of five expect July-December increases to come in at a faster clip than during the first six months of the year).

1984 demand: A hefty 84% of *PW* readers say the new year will be better for their firm than 1983. The voting is about equally divided between those anticipating moderate (1-4%) real growth and those hoping for more substantial (5% or higher) advances. And the outlook looks to be increasingly rosy as

How PW Readers view 1984



Source: PurchasingWorld

the year wears on. Four out of five respondents expect second-half 1984 GNP to be better than first-half GNP.

Inventories: Close-to-the-vest strategy is still the order of the day. Despite the expected demand improvement, nearly two out of every three purchasing executives hope to hold stocks at current levels. The remaining one-third split between those planning on additions and those determined to make still more cuts.

Delivery performance: Improving demand will take its toll. An overwhelming 79% expect some leadtime stretchout. But most of these respondents hasten to add that the stretchout will be from the very low waits that have prevailed through most of the just-ended year.

Areas tightening the most: Electronic components are number one on the list. Several PMs also voice some fears about aluminum and flat-rolled steel products. Other items receiving one or more votes include corrugated boxes, plastic resins, specialty pigments, petrochemicals, and bearings.

1984 problems: As suggested by all the above, prices and extended leads are areas of concern to a substanital number of buyers. But there are other areas which also will bear close watching. These include (1) fear of supplier failures (via Chapter 11 or Chapter 13), (2) reduced product mixes as suppliers eliminate specialty items, (3) poor quality and reliability, (4) worsening vendor services, (5) delayed reopening of mothballed supplier plants, and (6) high interest rates.

Several buyers also speak of the need to upgrade their price forecasting techniques. They note that this area will become increasingly important as supply and demand come back into better balance.

This will be a year of heavy collective bargaining, as the Bureau of Labor Statistics figures show. But the chances of major strikes appear slim because of high unemployment. Negotiations probably center on job security rather than on wage hikes.

Labor negotiations in 1984

PRELIMINARY

Month	Expirations and/or scheduled wage reopenings.		Principal industry
	Agreements	Workers covered (thousands)	
January	36	88	Petroleum refining
February	25	69	
March	68	196	Construction
April	114	292	Construction
May	103	270	Construction
June	122	738	Railroads, construction, maritime
July	34	164	Food stores
August	32	88	...
September	40	930	Automobiles, bituminous coal
October	29	80	...
November	21	56	...
December	15	49	...
Total	636	3,005	...
All bargaining units	1,630	7,926	

1/ The total is less than the sum of the parts because three contracts have both a reopening and an expiration in the year

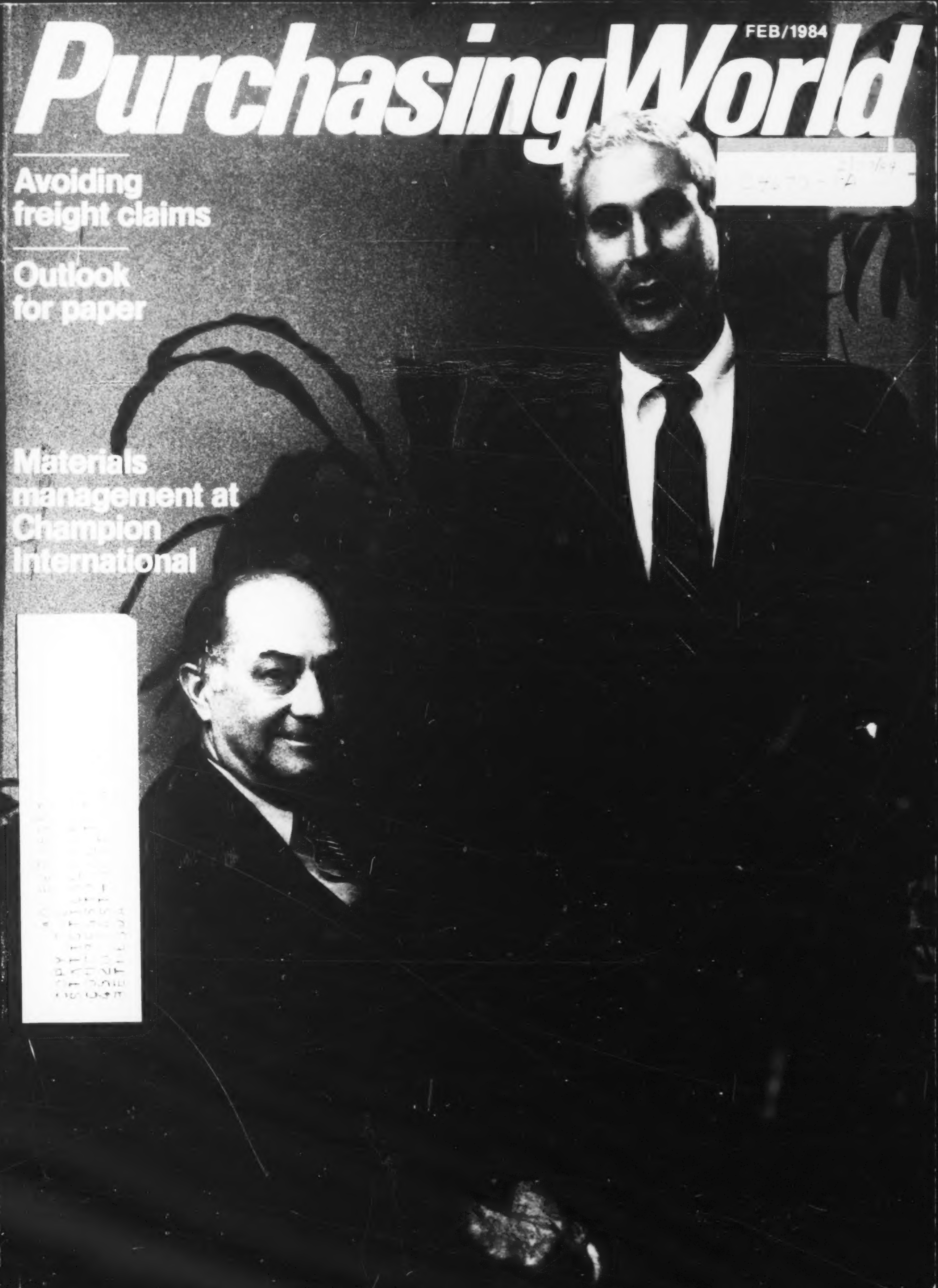
FEB/1984

PurchasingWorld

Avoiding freight claims

Outlook for paper

Materials management at Champion International



PurchasingWorld

Vol. 28, No. 2 - February 1984

Helping you manage the business of buying

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HUEBNER PUBLICATIONS, INC.
Subsidiary of International Thomson Business Press

Editorial offices:
800 S. Northwest Highway
Barrington, Ill 60010
Phone: 312—381-5971

PW PREDICTS

Energy

CURRENT SITUATION: Prices continue to take a breather—remaining virtually unchanged for over six months. Much of the favorable news stems from the continuing oil glut. But even heretofore fast-rising natural gas and electricity have slowed down—with these latest year-to-year changes: natural gas (-1%) and electricity (+4%). **Credit the pause to ample supplies and continuing conservation.**

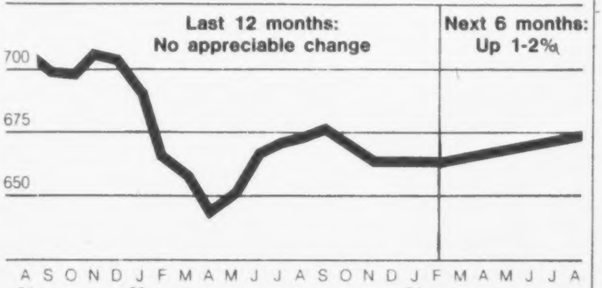
DEMAND: The new year will finally see some gains. But they'll be quite modest—with the overall advance put at only 3.5%. **The most solid 1984 advance will be in natural gas** where last year's 5.5% decline will give way to about a 4% gain. **Coal should rack up a similar increase.** Oil usage will also be up after five years of decline. **But the gains will be small** (only about 2.5%)—as a fractional falloff in gasoline blunts 4-5% increases in middle distillates and residual fuel oil.

SUPPLIES: It looks like clear sailing—barring any big new Mideast blowup. Indeed, OPEC producers will have to stop cheating on production quotas if another big oil glut is to be avoided. Adding to the rosy supply picture are still-increasing non-OPEC oil supplies. **Also reassuring is the fact that current natural gas supplies are estimated to exceed demand.** And in the coal sector, 1984 production will be just on a par with expected demand—**with a lot of unused capacity still waiting.**

PRICE OUTLOOK: Supply-demand projections suggest a continuing noninflationary trend. Right now, it's hard to make a case for more than a 3-4% increase in energy costs for 1984 as a whole. True, electricity boosts could be somewhat higher (5-6%). But this should be offset by moderate hikes in such other key areas as coal (4%), petroleum-based products (1-3%), and natural gas (1-2%). **In any event, energy tags should again lag the overall U.S. inflation rate.**

Fuel and power prices

Index: 1967 = 100



competition from cheap imports. Ditto, (1) diammonium phosphate (where Gulf quotes are in the $200-210/ton range—up more than $50/ton from a year ago) and (2) potash which now commands $103/ton at Great Lake ports.

Copper

Still no signs of a sustained rally. Most of the softness can be traced to still-rising inventories (combined Comex and LME stocks now total over 850,000 tons). Adding to the glut has been (1) a stepup in U.S. output and (2) less-than-expected demand gains (reflecting sluggishness in capital goods which accounts for more than half U.S. consumption). To be sure, the latter is beginning to turn around. But it will take time to bring stocks down enough to support a significant price rise. Indeed, it could be midyear before prices even rise up to 75-80¢/lb—a level that still would be well below most producers' breakeven points.

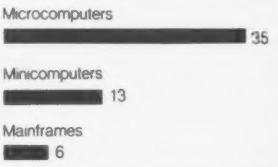
Computers

All signs point to another banner year. Biggest demand gains, according to the Computer and Business Equipment Manufacturers Association, will again be in the microcomputer areas where some 877,500 units are expected to clear the market (up a resounding 35% from 1983). Smaller gains of 23% for minicomputers (to 60,570 units) and 5.8% for mainframes (to 10,400 units) are also anticipated.

While CBEMA does not forecast prices, **PW** talks with other industry spokesmen suggest continued competion—with perhaps another 5-10% decline in the personal computer sector before year is out.

1984 computer demand

Percent increase over 1983



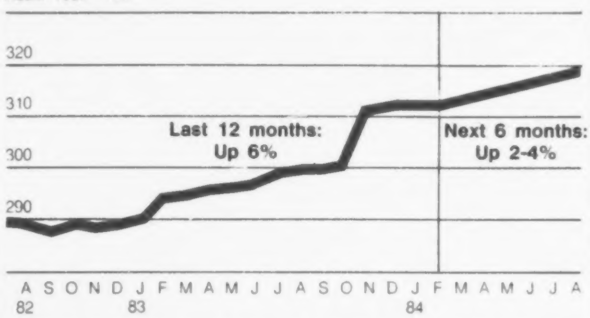
Lead

Cold weather—upping battery demand—has helped push prices up into the mid-to-upper 20s range. But that should be it as (1) imports increase and (2) demand from battery makers soon begins to tail off seasonally. Long-term growth also leaves a lot to be desired—with only fractional global increases anticipated over the next five years—as the lead-in-gasoline phaseout spreads overseas and smaller batteries require less metal (only 18 pounds now versus some 25 pounds per battery just a decade ago).

Phenolic resins

First quarter prices are up anywhere from 1-5¢/lb, depending on product. Behind the firming: an increase in basic phenol costs and improving demand from the auto and construction markets, which together pushed 1983 demand up by more than

PW PREDICTS



Building materials prices

Index: 1967 = 100

CURRENT SITUATION: Prices have been edging up, but not nearly as much as suggested by the big 50%-plus increase in 1983 housing starts. That's not to say that there haven't been some big hikes—notably in gypsum products and softwood 2 x 4s. **But by and large weakness in other areas, such as cement and structural steel, have kept the overall advance over the past 12 months to a relatively modest 6%.** Also holding down averages has been the rather lackluster performance in nonresidential activity.

DEMAND: A modest improvement is anticipated for 1984—as nonresidential construction rises about 6% in real terms, and housing remains on a high plateau. **Softwood lumber** could be up about 6-8%. **Gypsum products** can also look for further gains. **Cement** consumption could rise by a substantial 10%. **Structural steel** should follow a similar pattern. **Building paper,** which was up a hefty 50% in 1983, should record a further 15% gain in 1984.

SUPPLY: No nearterm problems are anticipated. There is certainly ample saw mill capacity. And the cement industry—if it manages to reach it's 1984 projected level—will still be operating at only 87% of its potential. The same is true for such other key materials as flat glass, insulation, plastic products, brick, roofing, paving, and structural steel items. **About the only item in somewhat snug supply is gypsum.**

PRICE OUTLOOK: Count on a 2-4% increase over the next six months—with the overall 1984 gain likely to fall in the 5.5-6.5% range. The key factor in holding tags in check will be increases in production. Some of the 1984 expected advances: softwood lumber (2-4%), flat glass (only 2%), refractories (2-4%), cement (6-7%), asphalt roofing (only 1.5-2.5%), building paper (5%), paints (5-6%), and gypsum (10% or higher). Structural steel tags will also be up. But because unrealistic lists are being lowered, the increases may not show up in official government indexes.

20%. With both industries likely to post further gains, supply and demand are coming into better balance. This, in turn, would seem to assure a factory operating rate in excess of 80%—a far cry from the 60% low which prevailed as recently as last September.

ABS plastics

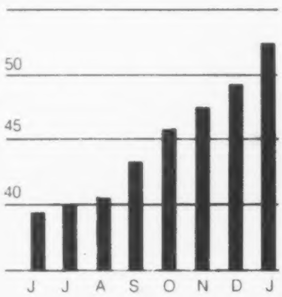
Count on paying about 3¢/lb (or 3%) more for molding grades. Behind the advance: Higher feedstock costs and booming demand which could be up another 10% this year (on top of last year's big 40% jump generated by the recovering transportation, construction, and appliance industries). Even so, there is still ample capacity, with the industry currently operating at well below its nameplate potential (727,000 metric tons per year). The point to keep in mind: That's far above the 460,000 metric tons which cleared the market in 1983.

Zinc

Recent advances into the 50¢/lb-plus range were not unexpected. Much ofthe strength reflects good demand (up 7% globally in 1983)—reflecting increased buying by the auto industry both in the U.S. and Germany. And the gains are likely to continue—as other areas jump back into the plus column. Thus U.S. shipments of both hot-dip and electrolytic galvanized sheet to the nonautomotive market could rise as much as 13% in 1984 (to 5.35 million tons). All told, this suggests further price advances, with the metal expected to edge up close to the 55¢/lb level by spring or early summer.

Zinc

¢/lb

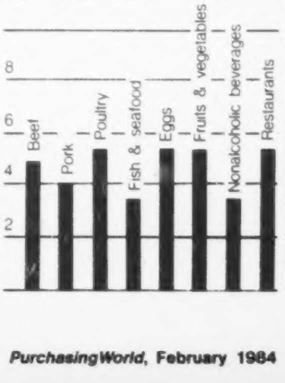


Food

Count on about a 4-7% increase in 1984 average tags—not all that bad considering last summer's drought and recent frigid Sunbelt weather. Some of the likely year-to-year average increases: beef (5%), pork (4%), poultry (5.5%), fish and seafood (3.5%), eggs (5.5%), dairy products (0.5%), fruits and vegetables (5.5%), cereals and bakery products (5.5%), and nonalcoholic beverages (3.5%). Eating out should cost a bit more—about 5.5% more to be exact.

1984 food prices

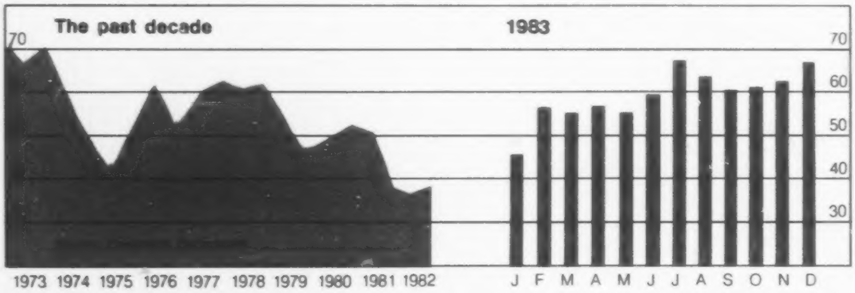
Percent increase over 1983



BUSINESS DATATRAK

NAPM business barometer

Based on five indicators (employment, inventories, new orders, production, vendor performance)



KEY ECONOMIC TRENDS

Solid growth seems assured

The trend is still up—with more and more industries now sharing in the recovery which began early last year.

On the other hand, it would be unrealistic to expect a continuation of recent, large, overall gains—some of which have run upwards of 7% on a seasonally adjusted real GNP basis. Factors which may slow down growth (something many economists feel is a good thing) would have to include (1) the big and still-growing trade deficit, (2) an enormous budget deficit, and (3) continuing high interest rates.

True, these factors were present in 1983, too. But they can now be expected to carry a bit more weight as the recovery goes into its second year.

Given all these restraints, most analysts are now talking in terms of 4-5% annual rates of advance through summer and into early fall. This, in turn, suggests that leading business barometers (now at peak levels) will begin to edge lower—though they will certainly continue to remain solidly in the plus column.

In any event, as noted earlier, economists aren't all that concerned. A good many of them, for example, say a deceleration in the rate of growth will slow down any inflationary pressures that might develop and therefore prevent the "overheating" that has aborted other recent business recoveries."

Result: continuing optimism about the new year—something which is being reinforced by the relatively tight inventory positions that continue to prevail. It's hard not to be encouraged, for example, by the fact that stocks in real terms have not grown at all over the past nine months.

Construction also promises to remain on a high plateau. Construction awards (a lead indicator of activity a few months hence) remains relatively unchanged—about 10% above a year ago (center chart).

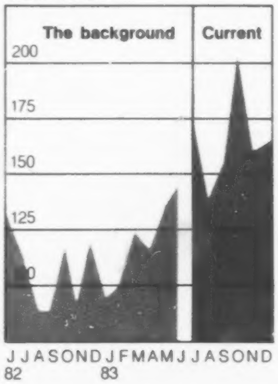
There are still other signs of basic business health, too. For one, capital spending may finally begin to carry its own weight. Thus machine tool orders, while hardly robust compared to the levels of a few years back, are now averaging considerably above late-1982 and early-1983 levels (see first leading indicators chart).

One key segment of the construction market (housing) also looks to have another good year—with starts coming close to 1983's strong 1.7 million units. Factors behind the optimism here include (1) more confident consumers, (2) new and less expensive types of mortgages, and (3) anticipatory buying on fears that mortgage rates could start to climb again.

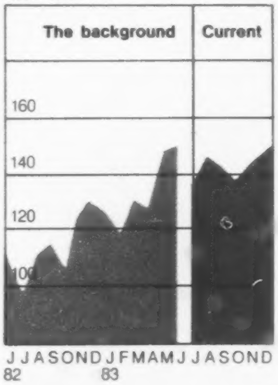
But perhaps the most solid indication of contin-

Leading indicators

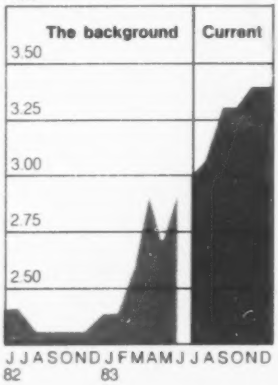
1. Machine tool orders
Millions of dollars



2. Construction awards
Index: 1977 = 100



3. Factory overtime
Hours



ued growth is the drop in unemployment. The jobless rate has dipped down close to the 8% mark—a fall of some 2.5 percentage points from late November 1982 peaks.

More important, there are signs of even further small jobless declines. Factory overtime has been on the rise (last chart) and help-wanted advertising continues its strong upward trend. The point to keep in mind: Both these trends have traditionally been associated with a declining unemployment rate.

Payment performance best in years

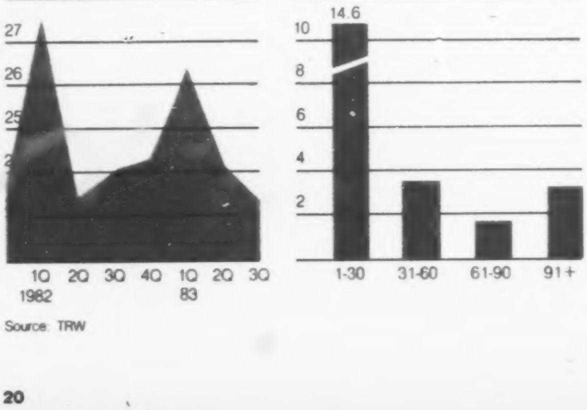
The typical firm is paying its bills somewhat faster these days.

That's not to say that delinquencies still don't constitute a fair amount of overall billings. Indeed, some 23.5% of American industry still pays its invoices after the due date. On the other hand, that latest figure represents nearly a three-percentage-point decline from early 1983 when the comparable delinquency reading was close to 26.5%.

The figures are based on a comprehensive ongoing survey by TRW's Information Services Division. Dr. Wynn B. Bussmann, who directs the operation, notes that the improvement is due to a combination of continued economic recovery and the healthier financial condition of many companies. He says that these factors have pushed the overall payment performance to a three-year high.

Bussmann adds that the trend to fast payment is expected to continue in 1984 as (1) cash flow improves, (2) lower inflation rates reduce the amount of illusory paper profits, and (3) slightly lower interest rates cut down on the inclination to drag out payments.

Past-due bills



Industry trend
% reporting

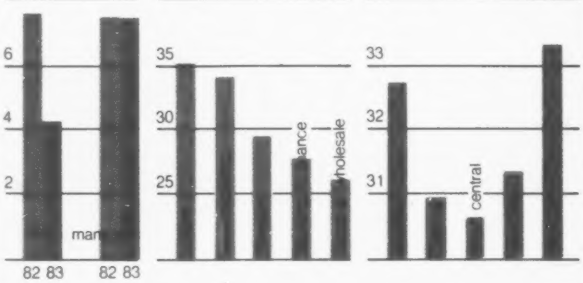
Days past due
Days

Source: TRW

PMs lose ground in salary levels

Purchasing managers did not fare all that well salarywise in 1983—both when compared to the previous year and to the increases other middle managers managed to get.

How PM salaries stack up



PMs versus other managers
% increase

PM salaries by industry
$ x 1000

PM salaries by area
$ x 1000

Source: Administrative Management Society

A new survey by the Administrative Management Society tells the story. Figures suggest, for example, that the typical PM pay boost last year came to only 4.2%—some 3.5 percentage points under the average 7.7% increase received the previous year.

What makes matters even worse is the fact that the average boost for some 20 middle manager categories did not decline at all—with the typical hike for both 1982 and 1983 clocked in at 7.6%.

On a more optimistic note, a spokesperson for the AMS says that a sudden deceleration in one year is generally followed by a sharp bounceback the next. Implication: 1984 PM salary increases could be fairly substantial.

In any event, the details (summarized in the chart) indicate that the average purchasing manager salary in 1983 came to around $31,900—but with considerable variation, depending on the industry involved. At the upper end of the range, for example, were utility buyers, who received an average of over $35,000 a year. Those working in retail and wholesale establishments received just a bit over $26,000. The typical manufacturing PM fell in the middle, earning about $32,400 a year.

CURRENT PRICES

Price picture is still encouraging

A full year of improving business activity has yet to give industrial prices any major upward jog.

To be sure, the near-level reading of Uncle Sam's comprehensive price index over the past few months may be a bit over-optimistic—for this government yardstick may well be failing to pick up some of the smaller discounts now being offered by many vendors.

Nevertheless, the figures have to be regarded as encouraging—and a far cry from other recent business recoveries when the industrial average began to move up strongly within a few months of upturn. Equally significant is the fact that the general lack of upward momentum seems to be across the board.

This is certainly true in the energy sphere where actual declines over the latest reported month were noted in crude petroleum, gasoline, LPG, residual fuel oil, and even electric power. And while natural gas is again moving up, the advance is relatively modest.

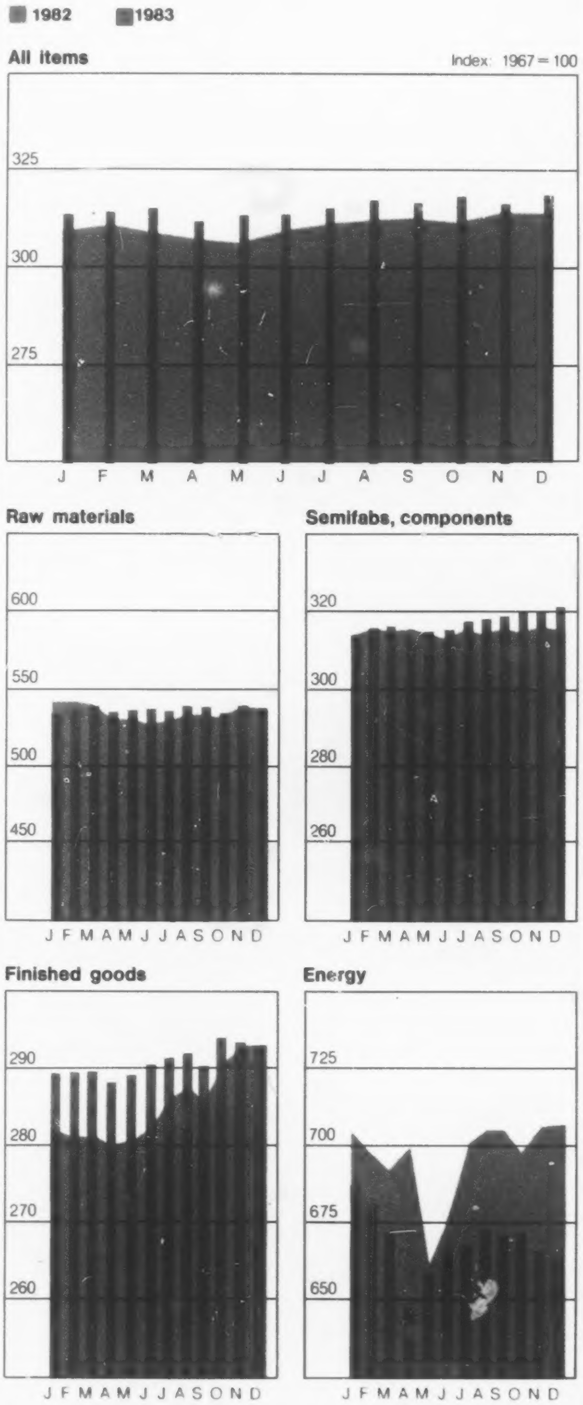
The same easiness appears in other key commodity areas. Industrial chemicals, for example, have again edged lower—as did inedible fats and oils, manmade fibers, and crude natural rubber. These decreases helped offset boosts in such other material areas as plastic resins, grey fabrics, and paperboard.

More highly fabricated

This month's breakdown

	Latest level (December)	% change from: Month ago	Year ago
Bearings	333.2	0.0	-0.6
Bolts, nuts, etc.	271.4	0.4	0.3
Chemicals, inorganic	290.6	-0.1	-4.2
Chemicals, organic	371.5	-0.5	3.0
Concrete products	303.7	0.0	1.7
Corrugated cartons	249.4	0.4	2.9
Cutting tools, small	278.9	0.0	0.7
Electrical instruments	274.8	0.0	7.9
Electric lamps (bulbs)	331.4	1.3	11.4
Electronic components	190.0	1.6	7.4
Fans and blowers	335.8	0.0	-0.3
Foundry and forge products	353.1	0.1	2.0
Fuel oil (residual)	1184.7	-1.3	3.6
Furniture, commercial	290.5	0.1	4.3
Gasoline	587.6	-2.0	-10.0
Glass, flat	230.0	0.0	2.1
Glass containers	351.0	0.0	-1.8
Gypsum products	321.4	2.4	26.6
Hand tools	351.0	0.2	1.4
Hand tools, power driven	220.9	0.0	-0.6
Industrial furnaces	369.1	0.2	3.5
Integrating and measuring instruments	225.6	0.4	5.0
Internal combustion engines	342.7	0.0	1.8
Lubricating oil	788.3	0.7	-3.9
Lumber millwork	308.5	0.1	7.7
Material handling equipment	286.5	0.2	0.1
Metal containers	338.2	0.0	3.0
Metal mill shapes (nonferrous)	315.6	1.6	3.7
Metal tanks	303.9	-0.4	-2.3
Motors and generators	336.0	0.1	5.9
Motor trucks (10,000 lb and under)	280.0	-0.3	1.7
Office and store equipment	154.9	0.1	1.2
Paperboard	259.5	0.6	6.3
Paper boxes and shipping containers	252.1	0.1	1.4
Paper office supplies	227.4	0.0	0.3
Paint	264.9	0.2	0.1
Plastic resins	298.3	0.6	5.6
Precision measuring tools	244.4	0.0	1.2
Pumps and compressors	346.3	0.3	-0.6
Refractories	354.3	0.0	5.1
Rubber belts and belting	334.1	2.2	3.1
Scales and balances	228.3	0.0	0.3
Steel products	356.4	0.1	3.8
Switchgear	269.3	0.0	1.5
Textiles, synthetic fibers	158.2	-0.8	-0.9
Textiles, gray fabrics	151.7	1.0	5.9
Tires and tubes	243.0	0.1	-5.1
Transformers and power regulators	223.9	0.4	1.6
Welding equipment	273.2	0.3	-1.9
Wire and cable	201.5	-0.7	2.1

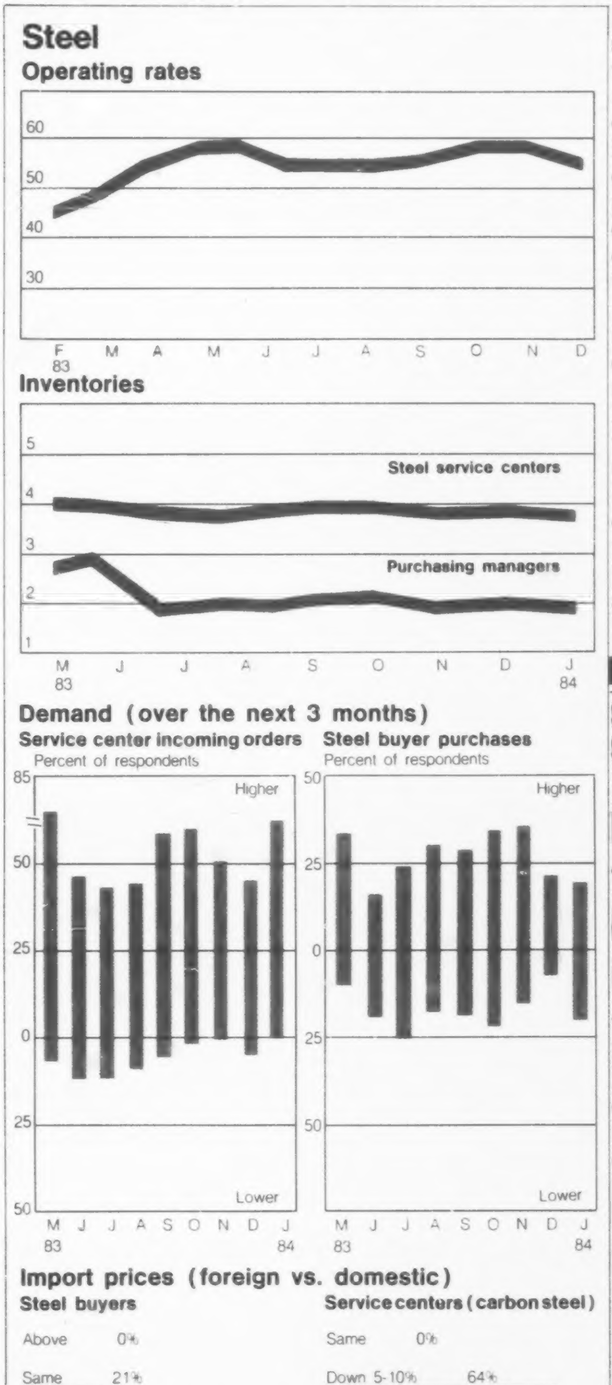
Industrial prices at a glance



Source: Bureau of Labor Statistics

BUSINESS DATATRAK

Steel



Source: Steel Service Center Institute, NAPM Steel Buyers Committee

lines, on the other hand, do seem to exhibit a somewhat firmer trend. Last month, for example, increases were noted in mining machinery, transformers, railroad equipment plastic machinery, machine tool parts, electronic components, and rubber belts and belting.

Price analysts, however, hasten to add that these increases in more highly fabricated items were generally quite moderate. And while they do feel the trend will lead to some first-quarter 1984 rise in overall industrial quotes, they say the increase will be small—probably only about 3-4% at annual rate.

STEEL SCENE

Markets firming as demand improves

The steel industry is starting 1984 on a relatively firm note—with both buyers and steel service centers anticipating improved ordering over the next few months.

Over recent days, for example, the number of purchasing managers predicting increased steel receipts has outnumbered those plannning on cutbacks. The same is true of distributors, where some two out of three Steel Service Center Institute (SSCI) members now see increases in business over the next three months—with not a single respondent looking for any dropoff in incoming business.

This brighter outlook is seconded by Andrew G. Sharkey, SSCI president, who now feels service center sales will approach 19 million tons in 1984. If the gain materializes, it would represent a hefty 19% jump over the more than 16 million tons shipped last year. That's also a whopping 33% over 1982's extremely low 14.3-million-ton level and a hair's breadth within the peak 19.1 million tons shipped back in 1979.

Also indicative of optimism is the growing tendency toward more steel service center capital spending. An informal survey of leading distributors, for example, suggests that most are planning on some additional increases—with a few dubbing the planned advances as "significant."

That's not to say that service centers are problem-free. Sharkey remains nervous about foreign competition. He notes, for example, that Brazilian sellers in recent months have been offering slit coil to service center customers.

Prices are, of course, the major incentive for such importing. And the advantage is still quite impressive—with more than one out of every three distributors saying that they are getting a 10%-or-higher price break on imported carbon steel. A very similar 37% report the same advantge over comparable domestic metal in the stainless steel category.

And the situation isn't expected to change. Specifically, 17% of those queried say they'll probably be more dependent on foreign steel over the next six months (versus only 10% of surveyed centers who contemplate less dependence).

This tendency toward more reliance on imported metal is also echoed by steel buyers where 17% say they expect to be more dependent versus only 13% who feel they'll be cutting back on imported metals.

Again the reason is the same—price. Some three out of every four PMs, for instance, note that foreign mills offers steel "slightly below" comparable domestic quotes—with another 4% deeming the price advantage as "substantial."

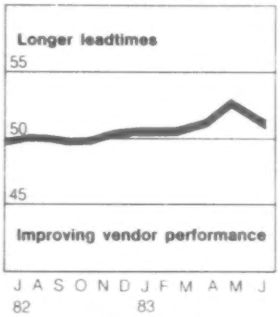
Some other key findings of the latest buyer and steel service center surveys:

- **Inventories:** They continue to edge lower (see chart). But from here on in there should be a levelling off—with those planning on future decreases pretty much balanced out by those who are now thinking in terms of increases.
- **Availability:** Spotty problems are anticipated. The products most often mentioned are coated sheets, cold-rolled sheets, and stainless. Most respondnets, however, add that the problems will probably be relatively minor—with no substanital bottlenecks currently anticipated.
- **Speed of payment.** Some 90% of steel service center customers are paying on time—well above the 79% low of last spring. Steel buyers report much the same for their firms' customers—with the 66% on-time reading up significantly from the 42% low of early last year.

Monthly procurement status report

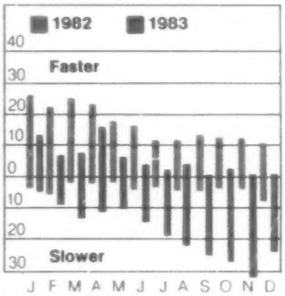
Leadtime index

A 'diffusion' index based on 158 key commodities. Above '50' indicates a tendency for leadtimes to stretch out. Below '50' suggests improving vendor performance

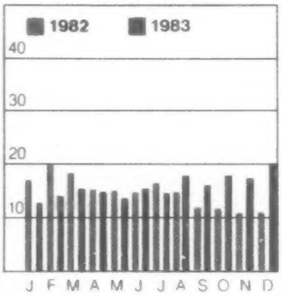


Delivery performance

Percent reporting deliveries

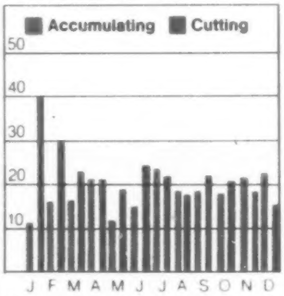


Forward commitments



Inventory strategy

Percent of respondents



Source NAPM

PROCUREMENT STATUS

Leadtime increases continuing

Waiting times continue to increase. But the extra delays (except in a few cases, such as electronic components) are still relatively moderate.

Indeed, American industry seems to be doing a better-than-might-have-been job in keeping extensions to a minimum. Part of the explanation lies in the fact that there has been plenty of excess capacity around to pick up the slack. Another factor has been the reluctance on the part of buyers to order more than is just barely necessary to keep up with expanding production needs.

The latter shows up most clearly in PM inventory trends. Despite higher activity, only 23% of purchasing executives queried by the NAPM Business Survey Committee say they are now adding to stocks—not all that many more than the 16% who say they are still cutting back.

Another indication that no one is pushing the panic button comes from the number of buyers committing 90 days or more in advance. While the current 20% reading is up a bit from previous months, it's still nowhere near the high percentages prevailing during the last big recovery.

Still another sign that things are still under control: The number of PMs reporting slower deliveries (24%) is under the 27% and 33% figures of the two previous months.

But perhaps the best indication of a "no sweat" situation is the surprisingly slow creep up in ***PW***'s exclusive leadtime index. This key barometer of delivery delays remains at 51—the same level of the past few months. That's only one index point above the neutral 50 level and far under the mid-50 readings that prevailed during the previous two business upturns.

Leadtimes and availability

Chicago: 1A mixed picture in steel. Reading down (in weeks) are c-r sheets (8-9), and light plates (2). But up are h-r sheets (4-5), heavy plates (4) and h-r bars (3-4). Some extension in softwood sheathing (2) and softwood plyform (2-3). Ditto, on electrical materials (3-4) and motors (2-3). Allocation on some semiconductors.

Cleveland: Pretty much of a standoff here—with these typical leads (in weeks): alloying materials (on demand), glassines and greaseproof papers (4-5), softwood and hardwood lumber (3), skids (3), waterproof papers (5-6), plastic shrink film (3), strapping (2-3), corrugated (3), polyethylene and PVC (2-3) and aluminum (12).

Los Angeles: Some stretchouts (to these new weekly waits) on copper tubing and fittings (5-6), semiconductors (22-36), and connectors (15-17). But coming in a bit are grey iron castings (6), cardboard cartons (3-5), stainless steel (8-10), custom storage tanks (6), wire and cable (7-9), printed circuit boards (8-10).

BUSINESS DATATRAK

Houston: Modest improvement is reported in cast steel valves—with new weekly waits as follows: 0-13 for 150-600 psi and 4-26 for 1500 psi and up. Remaining unchanged are mill steel (4), forgings (4-6), MRO items (3), electric and electronic components (8), air compressors (4-6), valves and fittings (0-1).

Philadelphia: Extensions are noted for such electronic components as linear ICs (to 20 weeks), T-square ICs (30), and low power Shotky devices (30). Modest increases, too, in steel items—with these new, higher weekly levels: hex bar stainless (10), hex shape carbon bar (14), stainless round coils (12), carbon sheet (8-10).

Pittsburgh: Few major changes over the past month. A sampling of current waits (in weeks): multiwall bags (6), corrugated boxes (3-4), folding boxes (3-4), standard steel drums (1), plastic packaging material (2-3), lumber (3-4), steel strapping (2-3), coil coating paint (4), polyethylene and PVC (5), and zinc (6).

Leadtimes (in weeks)

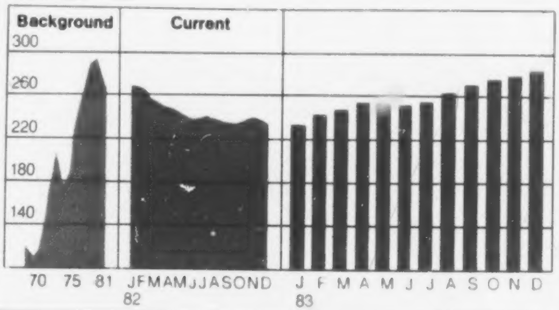
	Now	Month ago	Six months ago
STEEL			
Sheet (Phil)	9	7	7
C-R Sheet (Chgo)	8½	10	10
Plate (Phil)	10	6	4½
Plate (Chgo)	4	3	2½
Reinforced (Hous)	6	6	6
H-R Bars (Phil)	4½	4½	4½
H-R Bars (Chgo)	3½	2½	2½
Cold-Drawn Bars (Phil)	4½	4½	4½
Galvanized (LA)	11	11	4½
Galvanized (Chgo)	7	7	7
Structurals (Chgo)	2½	2½	2½
Structurals (Hous)	17	17	17
Tubing (Phil)	7	7	6
Grey Iron Castings (LA)	6	6½	10
Steel Castings (Hous)	11½	11½	11½
Forgings (Hous)	7	7	7
Pipe, Carbon (Hous)	13	13	13
ELECTRIC & ELECTRONIC			
Cables (Chgo)	8½	8½	8½
Capacitors (Chgo)	14	14	13
Circuit Breakers (Chgo)	6	6	6
Electromech. Devices (LA)	9	9	8½
ICs (Linear) (Phil)	20	11	11
Motors (Phil)	21	21	21
Motors, 1000 hp & Up (Hous)	39	39	39
Printed Circuit Boards (Chgo)	10½	10½	7
Relays (Chgo)	15	15	15
Resistors (Chgo)	10	10	10
Resistors, Wirebound (Phil)	9	9	10
Transformers (Chgo)	10	10	10
LUMBER			
Hardwood (Pgh)	3	3	3
Hardwood (Clev)	3½	3½	3½
Plywood (Chgo)	2	2	2
Plywood (Phil)	1½	1½	1½
Softwood (Clev)	3	3	3
Softwood (Phil)	1/5	1/5	1/5
Softwood (Pgh)	3	3	3
Particleboard (Phil)	2½	2½	2½
CHEMICALS-PLASTICS			
Adhesives (LA)	½	½	½
Naphthalene (Chgo)	2	2	2
Paint (LA)	4	4	4½
Paint, Coil Coating (Pgh)	4	4	4
Paint, Maint. (Clev)	2½	2½	2
Polyester Resin (LA)	2	2	2
Polyethylene Resin (Clev)	2½	2½	2½
Polyethylene Resin (Pgh)	4	4	4
PVC Resin (Chgo)	2½	2½	2½
PVC Resin (Pgh)	4	4	4
Titanium Dioxide (LA)	1	1	1
PACKAGING			
Bags, Kraft (Pgh)	5	5	5
Bags, Multiwall (Clev)	9	9	9
Bags, Multiwall (Pgh)	6	6	6
Cartons, Corrugated (Clev)	3	3	3
Cartons, Corrugated (Hous)	3	3	3
Cartons, Folding (Phil)	6½	6½	6½
Cartons, Folding (Pgh)	3½	3½	3½
Cellophane Wrap (Phil)	5	5	5
Plastic Bags (Pgh)	3½	3½	3½
Plastic Pkg. (Pgh)	3	3	3
Shrink Film (Chgo)	4	4	4
Shrink Film (Clev)	3	3	3
Drums, Fiber (Pgh)	1	1	1
Drums, Steel, Std. (Pgh)	1	1	1
Wood Pallets (Chgo)	2½	2½	2½
Wirebound Boxes (Pgh)	4½	4½	4½
Strapping (Clev)	2½	2½	2½
Strapping (Pgh)	3	3	3
PAPER			
Fiberboard (Clev)	3½	3½	3½
Glassine (Clev)	4½	4½	4½
Glassine (Pgh)	5½	5½	5½
Groundwood (Clev)	4½	4½	4½
Groundwood (Pgh)	7	7	7
Kraft (Clev)	1	1	1
Kraft, Bleached (Clev)	1	1	1
Kraft, Bleached (Pgh)	5	5	5
Kraft, Natural MFNS (Clev)	1	1	1
Laminated (Clev)	8	8	8
Tissue (Pgh)	5½	5½	5½
NON-FERROUS			
Aluminum Coil (Chgo)	11	11	11
Aluminum Plate (Chgo)	9	9	9
Aluminum Sheet (LA)	4½	4½	4½
Aluminum Sheet (Chgo)	14	14	11
Brass Castings (LA)	7	7	8½
Brass Rods (Chgo)	3½	3½	3½
Brass Sheet (Chgo)	9	9	8
Brass Tube (Chgo)	9	9	8
Copper Fittings (LA)	5½	5	5½
Copper Mill Prod. (Pgh)	6	6	6
Copper Tube (LA)	5½	5	6½
Copper Tube (Phil)	6	6	6
Lead (Pgh)	2	2	2
Magnesium (Pgh)	6	6	2
Manganese (Clev)	1	1	1
Nickel (Clev)	1	1	1
Nickel (Pgh)	2	2	2
Silicon (Clev)	1	1	1
Tin (Pgh)	3	3	3
Wire, Specialty (LA)	5	5	5
Zinc (Pgh)	6	6	2
MISCELLANEOUS			
Bearings, Domestic (Phil)	12	12	12
Bearings, Foreign (Phil)	26	26	26
Boilers & Furnaces (Hous)	35	35	35
Compressors, Centrifugal (Hous)	52	52	52
Compressors, Reciproc. (Hous)	39	39	39
Fasteners (Chgo)	½	½	½
Fasteners (LA)	4	4	4
Fasteners, Std. (Phil)	2	2	3½
Heat Exchangers, Carbon-alloy Steel (Hous)	20	20	30
Heat Exchangers, Hi-pressure (Hous)	21	21	43
Insulation Mat'l. (LA)	7	7	10
Machined Parts (Hous)	9	9	9
Pipes & Valves (Chgo)	2	1	1½
Pumps (Hous)	39	39	41
Pumps (LA)	9	9	9
Rubber, Synthetic (LA)	2	2	2
Rubber Hose (LA)	4	4	4
Tungsten Carbide Parts (Hous)	15	15	15
Valves, Cast Steel (Hous)	8	8	8
Welding Supplies (Hous)	5	5	5

BUSINESS DATATRAK

Raw material price barometer

Latest month	282.4
Month before	279.8
Year ago	227.4

Index: 1967 = 100



Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	347.00	347.00	[illegible]
Steel, structural shapes, Pitts., cwt	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt	24.40	24.40	24.40
Steel, bars, dlvd. Phila., cwt., merchant quality	17.50	17.50	17.50
Steel, bars, Pitts, cwt	17.5	17.5	14.35
Steel, bars, C.R., Pitts, cwt	26.00	26.00	31.00
Steel, plates, Pitts., cwt	23.25	23.25	24.25
Steel, plates, H.R., Pitts., cwt	23.25	23.25	24.25
Steel, sheets, C.R., Detroit, cwt	27.10	26.15	24.65
Steel, strip, C.R., Chi., cwt	35.30	35.30	29.05
Steel, basic wire, Pitts., cwt	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	0.760	0.750	0.470
Antimony, in alloy, lb	2.00	2.00	2.00
Beryllium-copper, cost ingot, lb	4.95	4.95	4.95
Brass, red, 85%, [sheet], lb	1.22	1.22	1.24
Brass, yellow, [sheet], lb.	1.17	1.17	1.18
Cadmium, ton lots, lb.	1.25	1.25	1.00
Copper, electrolytic, wire bars, refd., lb	0.68	0.68	0.77
Copper sheet, over 24 in., lb	1.31	1.31	1.33
Lead, common, N.Y., lb	250	250	205
Magnesium, pig ingot, [99.8%], lb	1.43	1.38	1.34
Mercury, 20 fl. lots, N.Y., fl	315.00	323.00	380.00
Molybdenum Climax Oxide/bags, lb	4.65	4.65	4.40
Nickel, electrolytic, producer, lb	3.20	3.20	3.20
Platinum, producer, oz	475.00	475.00	475.00
Silver, N.Y., oz	8.20	9.35	12.00
Tin, Straights, N.Y., lb	6.25	6.30	6.21
Zinc, Prime West, East St. Louis, lb	0.49	0.49	0.38
Zinc, die casting alloy, No. 3, lb	0.555	0.555	0.465
PAPER			
Uncoated book 13 offset, ton	760.00	760.00	800.00
Watermarked bond, ton	915.00	915.00	845.00
Gummed sealing tape, carton	15.45	15.41	15.50
Boxboard, mach. clay ctd. recycled sheets 80 bright, .016, ton	475.00	475.00	475.00
Wrapping paper, std. distribution cost, kraft basis wt. 50 lb., roll	28.00	28.00	28.00
Kraft linerboard, 42 lb., unbleached, ton	290.00	290.00	250.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd	0.315	0.317	0.229
Cotton drill, 1.85, 59", 68x49, N.Y., yd	1.02	1.02	0.95
Cotton middling, 1", N.Y., lb	0.694	0.716	0.616
Printcloth, 48", 80x80, N.Y., spot, yd	0.840	0.840	0.610
Army duck, 37", 13 oz., yd	1.79	1.69	1.00
Blended printcloth, 64", 78x54, yd	0.71	0.71	0.65
20s combed yarns	2.14	2.10	1.70
Wool tops, N.Y., lb	3.60	3.60	3.60

	Latest price	Previous month	Year ago
CHEMICALS			
Acrylonitrile, tanks, lb.	0.43	0.43	0.43
Ammonia, anhydrous, fertilizer, wholesale, tanks, ton	195.00	195.00	210.00
Benzene, petroleum, tanks, Houston, gal.	1.41	1.45	1.42
Caustic soda, 76% solid, drums, carlots, cwt.	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb.	0.58	0.58	0.66
Formaldehyde, USP, 37%, [12% to 15% meth.], tanks, lb.	0.106	0.106	0.101
Glycerine, synthetic, tanks, lb.	0.810	0.730	0.725
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	0.450	0.450	0.715
Naphthalene, crude, tanks, lb	0.22	0.22	0.22
Phthalic anhydride, tanks, lb.	0.305	0.305	0.310
Polyethylene resin, low density liner film grade (market price), lb.	420	.420	.290
Polypropylene, homopolymer grade (market price), lb	0.42	0.42	0.35
Polystyrene, general purpose grade (market price) lb	0.40	0.40	0.38
Shellac, bone dry, N.Y., lb.	1.65	1.65	1.65
Soda ash, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	0.350	0.350	0.350
Sulphur, crude, ex-terminal, Tampa, Fla., lt.	132.50	132.50	135.00
Sulphuric acid, 66%, commercial, tanks, ton	56.35	56.35	56.35
Titanium dioxide, anatase, reg., carlots lb.	0.69	0.69	0.69
Xylene tanks, gal.	1.35	1.35	1.45
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	311.65	318.25	300.60
Lumber 2x2, pine, mbf, cl	310.60	313.50	288.80
Plywood, plyform, 3/4", msf, cl	551.20	546.35	557.35
Plywood, 5/8", msf, cl	350.75	355.25	340.25
Cement, bulk, ton, tl	61.78	61.88	62.02
Sand, ton, cl	6.12	5.99	5.89
Ready-mix concrete, 3,000 psi/cu. yd., 15 cu. yd.	45.75	45.64	46.17
Crushed stone, 1½", ton, cl	7.83	8.00	7.81
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.76	0.76	0.75
Gypsum sheathing, ½"x1"x8", msf, tl	192.50	181.57	159.04
Brick, common, per thousand, tl	171.83	171.33	173.00
Asphalt paving, AC-20	159.64	158.71	156.77
Concrete sewer pipe, 12", prem. joint, per foot, cl	6.79	6.80	6.63
FUELS			
Fuel oil, No. 6 or Bunker C, Gulf, bbl	25.75	24.40	22.75
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	31.50	30.75	30.50
Gasoline, 91 oct., reg., Los Angeles, rack, gal	0.810	0.820	0.810
Gasoline, 94 oct., reg., Chi., tank car, gal	0.765	0.770	0.857
Heating oil, No. 2, Chi., bulk, gal	0.835	0.725	0.863
Heating oil, No. 2, N.Y., bulk, gal	0.878	0.818	0.858
Heavy fuel, PS 400, Los Angeles, rack, bbl	26.25	26.25	25.05
Jet kerosene, gal	0.860	0.780	0.860
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	0.460	0.460	0.475
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	98.00	90.00	62.00
Steel, No. 1, hvy., dlvd., Chi., ton	88.00	83.00	54.00
Copper, No. 1, East, wholesale buy, dlvd., lb	0.585	0.605	0.595
Copper, No. 2, East, wholesale buy, dlvd., lb	0.495	0.510	0.530
Brass, red, East, wholesale buy, dlvd., lb	0.545	0.565	0.555
Brass, yellow, East, wholesale buy, dlvd., lb	0.315	0.320	0.315
Alum., old sheet/cast, E., wholesale buy, dlvd., lb	0.500	0.450	0.230
Alum., mixed clip., E., wholesale buy, dlvd., lb	0.515	0.475	0.240
Zinc, old, East, wholesale buy, dlvd., lb	0.185	0.190	0.075
Lead, clean solids, East, wholesale buy, dlvd., lb	0.150	0.150	0.100
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	25.00	25.00	5.00
Paper, old corrug. box, dlr., N.Y., ton	21.00	21.00	4.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb	0.110	0.105	0.100
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb	0.33	0.33	n.a.

[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]

Demand to support higher paper prices

The paper industry, coming off a late-1983 recovery, can look forward to another bullish 12-24 months. At least that's what Wharton Econometric's new projections are suggesting.

Using their complex mathematical model, analysts at the Philadelphia-based consulting firm see paper production up 7.6% this year and another 4% or so in 1985 when the economy is expected to begin cooling off a bit.

These kinds of demand increases, which virtually guarantee close-to-capacity operating rates, also seem to suggest a continuation of recent price hikes. Wharton computer printouts, for example, point to an average 7.4% increase in industry prices over the next 12 months—and only a fractionally higher 8.1% advance for the subsequent year (1985).

The latter projection, however, could be somewhat misleading. Price hikes are expected to peak in early 1985—with somewhat smaller advances in store for late 1985 and early 1986.

Demand and price trends will also be uneven—depending on the particular sector of the industry (see charts). Developments in some of the key areas are expected to shape up along these lines:

- **Containers:** This especially cyclical sector is very much linked to movement in overall industrial production. In any case, because of a lag in responding to the 1983 business pickup, demand should grow in excess of 7% this year—but slow down to near 4% in 1985.

As for container prices, look for about a 6.4% advance over the current year—reflecting vastly improved demand and near-full-capacity operations for unbleached paper and paperboard. Moreover, since little new production potential will be coming on stream, price hikes for 1985 will continue at or even slightly above 1984 levels.

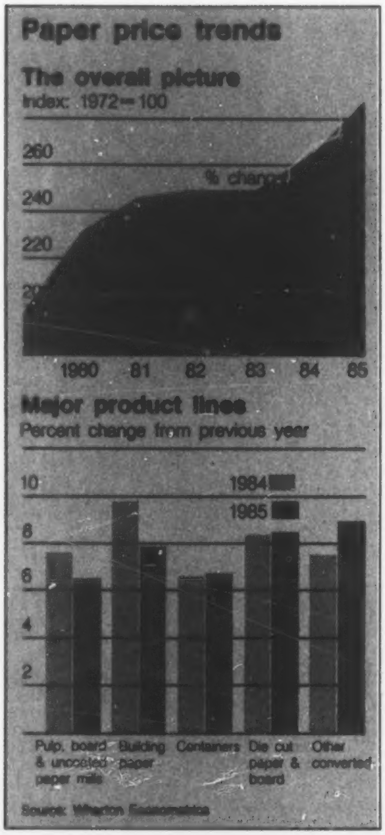
- **Building papers:** In contrast to the container sector, this area recovered very early in the current recovery, showing positive growth even in 1982. Supported by the housing boom, production swelled in 1983, while a price increase close to 5%during that year represented the only significant price advance for any sector within the overall paper industry.

Prices, which gained close to 5% in 1983, could well chalk up an advance of over 9% for 1984 as a whole. But as demand pressures ease a bit in 1985, prices are expected to grow more slowly—remaining in the 7% range throughout the year.

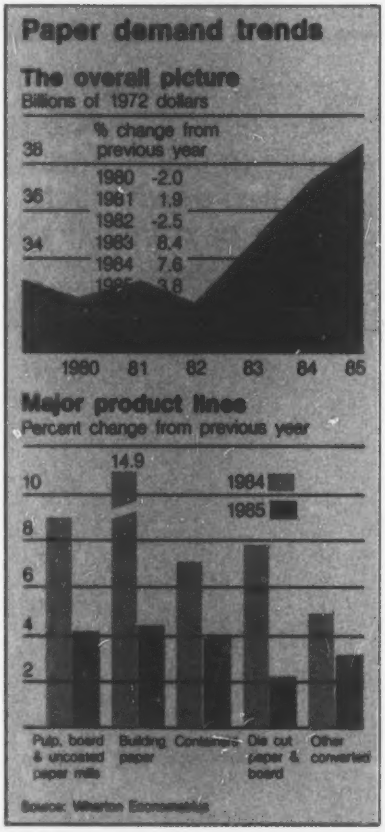
The 1985 demand slowdown will for the most part reflect some easing off in housing. But with nonresidential activity remaining strong, overall use of building paper should still manage to rack up a fair-sized 4.3% gain—though nothing like the big 14.9% increase targeted for the current year.

- **Pulp, unbleached paper, and paperboard:** Prices have until recently been quite depressed, showing only small signs of improvement even at the end of 1983. This is due primarily to two factors: (1) the oversupply of newsprint (excess capacity here is a problem in both the U.S. and Canada—and although utilization will improve in 1984, some excess will remain) and (2) the poor demand for market pulp. On the latter score, international buying has been too weak to support any significant increase in pulp prices, which are determined internationally.

However, as the economies of our trading partners recover in 1984, demand for pulp will pick up enough to support higher pulp quotes. The Wharton forecast calls for prices in this overall category (pulp, unbleached paper, and paperboard) to jump 7.6% in 1984—more than recouping the 1.6% decline of last year. Price boosts will continue at a more


Paper price trends

Source: Wharton Econometrics


Paper demand trends

Source: Wharton Econometrics

Source: Wharton Econometrics

Capacity expansion in fine papers will not be enough to push operating rates down much over the next couple of years.

moderate pace in 1985—averaging near 6.6%.

As for overall demand in this sector of the paper industry—look for a gain of 8.9% this year and 4.2% in 1985 as a result of improved demand both here and abroad.

- **Other converted products:** Demand in this sector (which includes coated papers, shipping sacks, bags, stationery, and sanitary paper products) is expected to be steady through 1985. After a big spurt in 1983, production will average about 3% a quarter (on a seasonally adjusted annual-rate basis).

Most individual products should share in this growth. Expansion in overall industrial production, for example, will fuel demand for bags and sacks. Sanitary papers will be affected by strong consumer expenditures. And most notably, fine paper buying will remain exceptionally strong as use by publishers, printers, and offices accelerates.

Specifically, strong consumption activity is fueling advertising, while renewed business strength has increased the use of office papers. Faced with large order backlogs and very high operating rates, almost all U.S. producers of fine papers announced September 1983 price increases averaging near 7%. Imports, which have not been important to this sector, have also been rising. And last, but not least, nothing indicates that inventories have been absorbing a large share of this big demand spurt.

Fine paper prices are expected to rise further in 1984—as demand remains strong and capacity utilization creeps still higher. True, capacity expansion in fine papers should be greater than for other grades over the next couple of years. But it will not be sufficient to push operating rates down that much in the next year or two.

Upshot: The strong price increases expected in fine paper will tend to influence overall averages in the "other converted product" sector—as operating rates near 100% are maintained through 1985. This should help push prices in this segment of the paper industry up 7.7% this year and 8.9% in 1985. **PW**

WHAT PMs ARE THINKING

Dip in freight rates has ended

Freight tabs aren't going to be quite the bargain they were last year. But by the same token, neighter are they about to take off. So say the overwhelming majority of purchasing and transportation executives responding to a nationwide ***PW*** freight cost survey.

The general feeling is that while good deals can still be negotiated, things won't be quite the same as last year when the combination of recession and deregulation actually reduced overall transportation bills for many shippers.

As one PM succinctly puts it, "We would be unrealistic to expect a repeat of last year's transportation cost savings. Nevertheless, we're confident we can hold the overall rate increase to around 5%—perhaps a bit under the general inflation rate."

Some of the more specific findings of the just-completed survey:

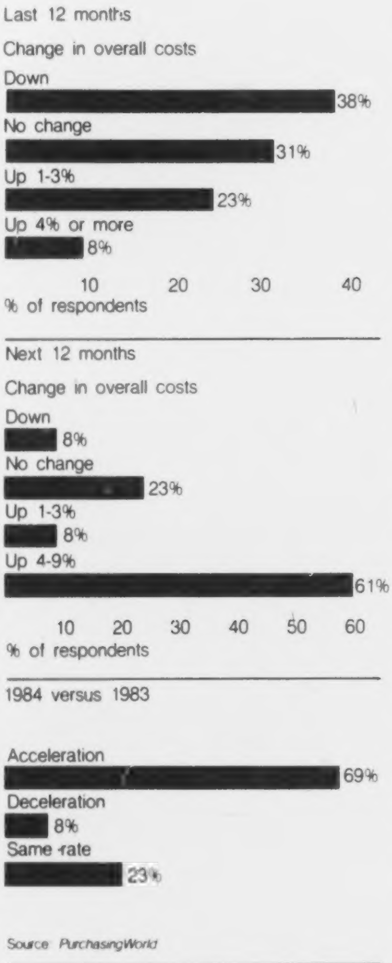
- **Actual 1983 rate changes:** Nearly seven out of every 10 queried say they managed to hold 1983 tags at or under year-earlier levels. And less than one in 10 say the increases ran over 3%. A good many of the declines showed up in the truck sector, where rates in some instances fell by more than 20%
- **Expected 1984 rate changes:** Only three out of 10 expect either no change or declines—far fewer than last year. And whereas less than one out of 10 saw increases in excess of 3% last year, this time around the comparable reading is six out of 10. Increases are also expected to begin appearing in the heretofore stable small-shipment area—with average 1984 hikes put in the 4-6% range.

But there's some good news for freight buyers, too. Specifically, while the number anticipating acceleration outnumbers those anticipating deceleration by a 9:1 margin, not a single respondent expects a return to the double-digit advances of a few years back.

This slow, rather than fast, acceleration is also confirmed by econometric projections. The Wharton model (regularly monitored by ***PW***) suggests about a 7% increase in overall freight tabs this year, with the 1985 advance put at only a slightly higher 8%.

But whatever the increase, buyers mean to keep the pressure on—in many cases by contractural agreements. Almost all those taking this tack say the potential savings come to at least 10%—with a few putting the cost advantage as high as 25-30%.

Buyers' view of freight costs



Source: *PurchasingWorld*

And it covers most transportation modes, too. One large, durable-goods producer who has been taking this approach on both rail and barge, for example, estimates a 20-25% saving, which translates into nearly $5 billion in money that might otherwise have been spent.

A few also tell of continuing intermodal shifts. These generally involve switches from rail to truck—with savings estimated in the 10-25% range. One PM, however, tells of how his shift from truck to UPS save his firm 5-10%.

The jury, however, still seems to be out on the use of more company-owned fleets. The number noting savings by taking this approach just about balanced out those who feel "for hire" truckers and contracts with common carriers can offer better overall deals.

Still another ploy noted as being useful in holding down overall bills: reducing the number of carriers by offering truckers bigger volumes. And another shipper tells of going to flat-rate pricing based on mileage for LTL and calling for multi-delivery for truckloads.

Technology is also helping—especially the shift to new, bigger vehicles and the increased use of tandem trailers that allow dropoffs at two different sites.

As one Midwest shipper sums it up: "The name of the game today is negotiation as carriers become increasingly willing to price their services on the basis of the real costs involved. If you offer them an opportunity to cut their costs, then chances are you can probably get them to drop their rates." ***PW***

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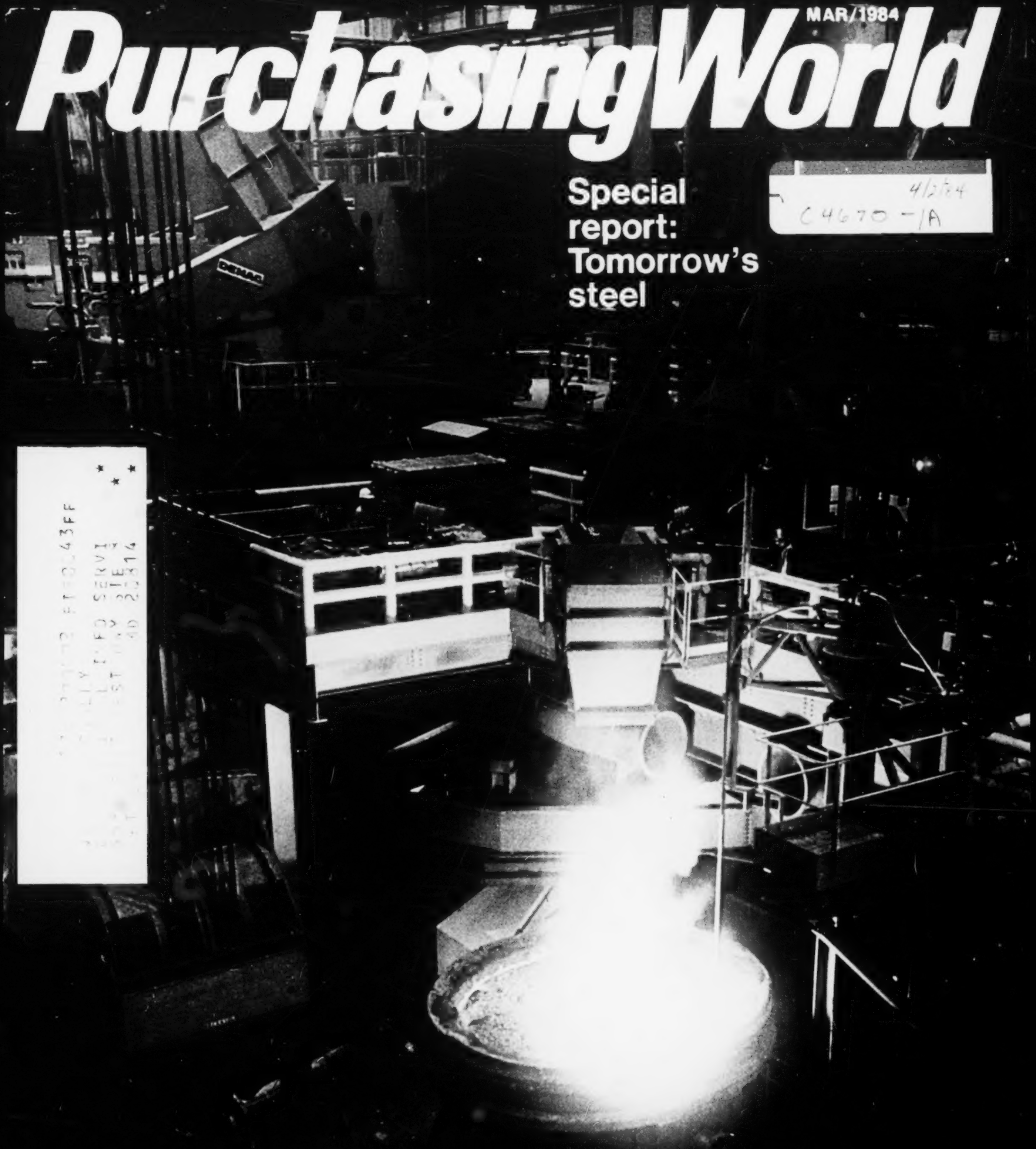
Special report: Tomorrow's steel



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the business
of buying

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Subsidiary of International Thomson Business Press

Editorial offices:
800 S. Northwest Highway
Barrington, Ill 60010
Phone: 312—381-5971

PW PREDICTS

Robert S. Reichard, executive editor

Upward price pressures building

Count on paying a bit more for your average industrial purchase mix over the next few quarters.

That's not to say that a major inflationary spiral is just around the corner—it's not. On the other hand, it's hard to ignore the increasing number of price boosts that have been posted over the past month or so. Most buyers today, for example, would agree that the more-than-year-long lull in price advances is finally coming to an end. And there's plenty of evidence to back up this conclusion.

First, there's the supply-demand factor. Rising consumption (coupled with only very modest capacity additions) are pushing up operating rates—with the typical American plant now working at close to 80% of its production potential. And even this may be on the low side. A fair amount of today's unused capacity is either economically or technologically obsolete and, hence, may never be reactivated.

Then, too, some industries (like electronics and paper) are already operating at pretty much full capacity. In any event, it is not inconceivable that a substantial number of industrial sectors will be operating at so-called "preferred" levels before the current year is out.

The possibility of increased labor costs also has to be factored into the price equation. If nothing else, the near-balance of wage boosts and productivity offsets seems to be ending. Efficiency gains are harder to come by as less efficient equipment is gradually brought back on stream and as we come closer to preferred levels of operations.

More important, labor demands are slowly beginning to accelerate. This is a big bargaining year, and as orders roll in and profits soar, organized labor is becoming more insistent on "getbacks" to make up for last year's recession-induced "givebacks." Quarterly unit labor cost increases have been accelerating over the past two quarters, and all indications suggest the same pattern for the first six months of the current year.

Then there's the dollar-exchange-rate factor. The greenback is not going to get any stronger. Indeed, if recent projections are correct, it may well begin to ease off in the months immediately ahead. Other things being equal, this will mean fewer really big import bargains. As a result, it will be a bit easier for domestic vendors to boost their own quotes.

Adding weight to these pressures is a new leading index of inflation (prepared by the Center for International Business Cycle Research at Columbia University). Comprised of three series (sensitive industrial material tags, financial market pressures, and the percent of workers employed), this index is now signalling some moderate price acceleration.

But, the accent should be on the word *moderate*. Under no stretch of the imagination can a case be made for another round of runaway inflation. What the evidence does suggest, however, is that some of the low inflation forecasts currently making the rounds may be a bit on the optimistic side.

Thus, the 4.5-5% increase in the GNP deflator envisioned by government economists for the 12-month period ending next December could be something of an underestimate. ***PW***'s own calculations now suggest a figure in the 5-5.5% range—with the fourth-quarter 1984 advance probably closer to a 6% annual rate.

Energy

It looks like pretty smooth sailing as far as energy cost pressures are concerned—at least from now through the end of the year. Indeed, the only sector facing continued double-digit increases is natural gas. And even this may be an exaggeration given the current glut in this clean-burning fuel.

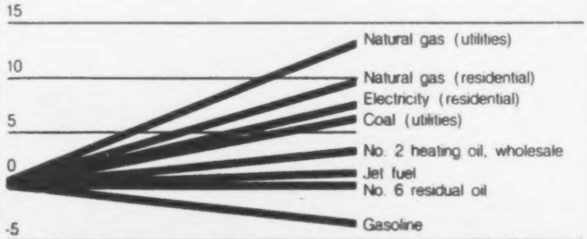
The new estimates (based on the latest Department of Energy quarterly forecast) are detailed in the accompanying chart. In general, they suggest little or no change in most petroleum-based products—and a liveable 6-7% increase in electricity rates (determined by combination of oil, gas, coal, and capital costs).

All this will be occuring in the face of an increase in energy consumption. This year, for example, the nation is expected to burn up 73.0 quadrillion BTUs—up 4% from last year's levels—with the increase due to (1) a 5.5% increase in real GNP and (2) a return to normal temperatures after last winter, which saw the thermometer averaging 9% warmer than longterm averages.

But despite this aggregate increase in energy use, fuel and power efficiency will continue to increase. Thus, the energy/GNP ratio is slated to fall to 45,100 BTU per 1972 GNP dollar in 1984—a bit under last year's 45,700 reading.

Energy price trends

Percent increase, 4th qtr 1983 to 4th qtr 1984



Source: Department of Energy

Copper

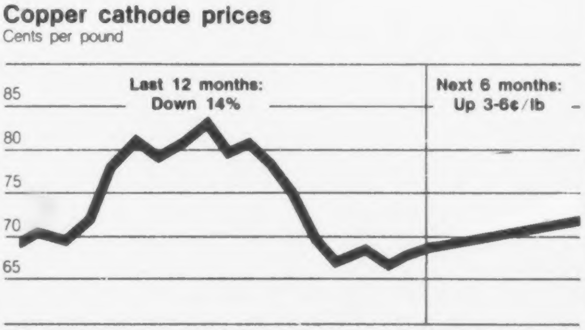
CURRENT SITUATION: Markets remain quite soft. Prices, for example, are still finding it hard to break out into the 70¢/lb-plus range—a level which would still leave most mines awash in a sea of red ink. Blame it on relatively disappointing demand gains—all at a time when there has been continued allout production by currency-hungry Third World countries. The inevitable result: continued topheavy inventories—with global stocks estimated to be the equivalent of a 3-month supply.

DEMAND: The absence of any big spurt in capital spending (a sector which accounts for more than half of U.S. consumption) has hurt. True, investment is beginning to turn around. Even so, **1984 domestic gains will only be in the order of 5%** (to 2.2 million tons of refined metal). **And for the Free World, the increase will be even smaller—only about 2.5%** (to 7.0 million tons).

SUPPLY: The huge inventory overhang (combined LME and Comex stocks now run upwards of 60% higher than a year ago) tells the story. And there's little to suggest any appreciable change. Indeed, Free World production of refined copper in 1984 should continue to top demand—reaching about 7.2 million tons (mostly from overseas sources).

PRICE OUTLOOK: Any nearterm advance will be slow and uneven. To be sure, better non-U.S. demand, increased Chinese requirements, and an improved capital spending outlook will all help. But **it's hard to see quotes reaching the 75¢/lb level by summer or early fall.** And it may well require another year of solid, world recovery to reach the 85¢/lb level which prevailed as recently as last spring. But these latter levels will eventually be needed—if only to make U.S. output viable. **The typical U.S. producer already needs 85-90¢/lb just to break even.**

Copper cathode prices
Cents per pound



Polyvinyl chloride

Quotes are beginning to firm after some late fall and winter weakness, with prices now put in the 33¢/lb range for the general-purpose grade. Nor is that the end of the line; tags are expected to rebound to the mid-1983 list level of 38¢/lb by sometime this summer. Behind this bullish projection: (1) reduced producer inventories and (2) forecasts for anywhere from a 5% to 15% increase in 1984 resin demand (enough to keep operating rates in the 85-90% range.

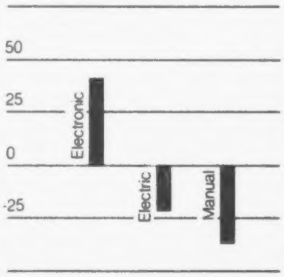
Office space

Shop around for some good rental deals. Reason: The overall office vacancy rate has zoomed to a peak 12.4% (up two full percentage points from a year earlier, and 3-4 times the low rates of 1980 and 1981). Biggest gluts (vacancy rates of 14% or more) are in Atlanta, Dallas, Denver, Houston, Miami, New Orleans, Phoenix, Portland, and San Diego. But don't wait too long. Concessions now being offered won't last forever as new office construction drops more than 30% under yearago levels.

Typewriters

Electronic models will continue to make big inroads. The Computer and Business Equipment Manufacturers Association (CBEMA) is projecting a whopping 38% increase in 1984 shipments of electronic units—up to 360,000 units. Electric types will still command a big share of the market, but the 500,000 or so projected to clear the market will represent a 23% decline from last year's levels. As for manuals—forget them. Only about 10,000 units are expected to be sold this year—a 33% decline from the already-low 13.300 purchased in 1983.

Typewriter demand
(% change 1984/83)



Source: CBEMA

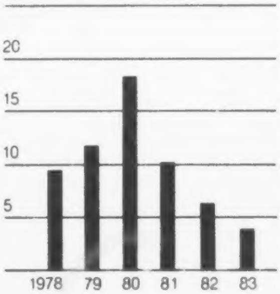
Fasteners

There's still a heck of a lot of discounting going on. Some 46% of the manufacturers and distributors queried recently by *Fastener Industry News* reported price breaks. Percentages off list noted by manufacturers: eyebolts, 20%; B7 stud bolts, 25%; heavy hex nuts, 15%; rivets, 10-40%; hex-head cap screws, 10-30%; spring pins, 30-40%; and special rivets, 40%. Percentages off list noted by distributors: nuts, bolts, and screws, 5-15%; locknuts, 20%; hex-head products, 15%; bolts, 5%; stainless steel fasteners, 10%; and washers, 5%. Both groups see price as one of their major problems through the first half of 1984.

Machine tools

A large inventory of unsold imported machines (perhaps as many as 12,000 units) continues to overhang the market. Upshot: extensive discounting, with incoming shipments now accounting for 37% and 36% of the metal-cutting and metal-forming sectors, respectively. In any event, price hikes should be quite moderate over the next 3-6 months, with little more than a rise of 3-4% at annual rate anticipated. But demand should gradually improve as the year wears on. Orders for 1984 as a whole are thus expected to be up as much as 40%.

Metal-cutting machine tool prices
(% change from previous year)



Computers

Look for more declines in small, home-type models. In fact, quotes in some cases are already as much as 15-20% under pre-Christmas levels. Factors contributing to the softness include (1) technological advances, (2) increasing competition from Japanese vendors, (3) price infighting among dealers, and (4) IBM's entry into the market with its new PCjr—a step that is likely to force price cuts in competing models.

Aliphatic organics

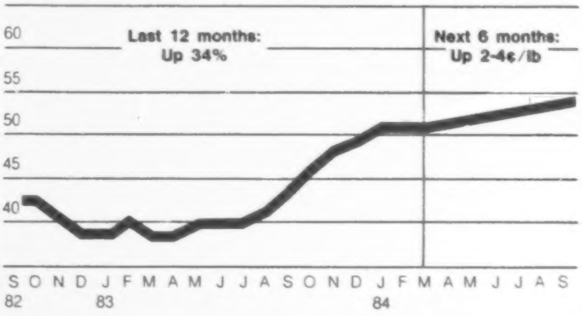
A mixed bag here. Competitive pressures have eroded most of last summer's methanol price boost to 45¢/gal. Indeed, shop around, and you can probably find supplies at only 42¢/gal as export demand continues to sag. On the other hand, good demand from the auto and industrial chemical sectors has allowed about 10¢ of a recent 18¢/gal boost in ethanol to hold, with 190-proof material going for about $1.80/gal. Also up are acrylic esters, where increases range from 1.5¢ to 3¢/lb.

Steel

Gradually improving demand is beginning to firm prices, with the big discounts of last year becoming increasingly hard to find (especially in the sheet sector). Nevertheless, price increases for the most part will be modest, as strong import competition persists. Right now, for example, it looks as if incoming shipments could run in the high 18-19 million-ton range this year. That's substantially above last year's 17-million-ton total. But despite all this import competition, the industry still expects to ship 77-79 million tons for the

Zinc

Cents per pound



CURRENT SITUATION: Market fundamentals remain quite strong. Current signs of basic strength would have to include (1) a recent European producer price boost to $1010/metric ton, (2) declining LME inventories, (3) tightness in SGH metal aggravated by new U.S. mint purchases, and (4) predictions of further consumption gains over the current year. And if there's still any doubt about underlying firmness, take a look at **the prevailing U.S. price, which at latest report was running a resounding 34% above year-earlier levels.**

DEMAND: Another good year now seems all but certain. U.S. usage is expected to rise to 5% (on top of last year's big 16.7% advance)—bringing consumption totals to well over 950,000 tons. Some 50,000 tons of this will be earmarked for the zinc penny. **And sizeable increases of 5% and 7% are projected for the galvanizing and die casting markets, respectively,** as the automotive and home building sectors of the economy continue strong.

SUPPLY: Things have become a bit snug—with SHG problems reported in some Midwest areas. Note, too, that **overall Free World stocks are down to near 300,000 tons—off some 200,000 tons from year-earlier levels. Although we're not approaching a shortage situation, there are problems—namely the decline in U.S. output** (**off 2.6% last year and 25% from 1981 levels**).

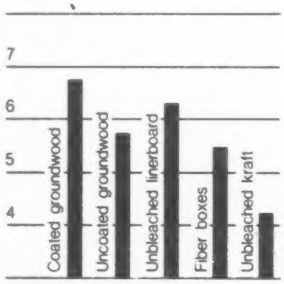
PRICE OUTLOOK: The metal is now in a strong position. Moreover, given the current supply-demand situation, further nearterm advances seem all but inevitable. **Best bet: a price averaging somewhere in the 55¢/lb range by late spring or summer** and then some leveling off as market forces come back into somewhat better balance. Beyond 1984, much depends on the longevity of the current business recovery. Assuming a continuation of the pickup into 1985—plus increasing consumer goods emphasis on galvanized products—a quote of near 58-60¢/lb isn't all that unrealistic for late next winter.

year—up a hefty 15% from 1983 levels.

Paper

Price boosts in both paper and board will continue, with about a 7-9% overall increase anticipated over the 12-month period ending in December. Behind the anticipated uptrend: 95%-plus operating rates and further strong demand gains. Some of the 1984 shipment icnreases anticipated by one major producer: newsprint, 6%; coated groundwood No. 5 paper, 6.8%; uncoated groundwood, 5.8%; unbleached linerboard, 6.3%; fiber boxes, 5.5%; and unbleached kraft paper, 4.2%.

Paper demand
(% increase 1984/83)



Source: St. Regis

Electronic components

The hard-to-get 64K dynamic RAM chip (recently quoted in the $4.50/unit-and-higher range) could drop to under $4 by summer or fall as new capacity comes on stream and demand begins to flatten out. The more powerful 256K chip under development won't be much of a factor this year. But sometime in 1985, the current "sample quantity" $100-plus price could drop to under $30. That's low enough to stimulate a major shift away from the 64K chip.

Aluminum

Markets remain buoyant, with domestic primary producers operating at more than 80% of their potential. New 1984 demand projections are also bullish. U.S. producers are betting on another 7% increase in shipments this year (on top of last year's big 12% gain to 13.2 billion lb). Free World trends are similar; last year's 9% gain in primary output is likely to be followed by another 6.5% gain. But there should be enough to go around with additional metal available from secondary producers. As for prices, ingot could well move up into the 80¢/lb range by late spring or summer.

Lead

Quotes could well edge lower as batterymaker demand drops off seasonally. Labor problems could give the heavy metal a temporary fillip, but by and large, it's hard to make a case for firmness. Other negative factors include (1) low LME quotes, (2) the substantial tonnages of imported metal available at discounts, (3) more-than-ample capacity, and (4) declining use of the metal in gasoline. There could be some fractional consumption gains in 1984, but given still-heavy stocks, it won't be enough to buoy prices until the next battery-buying season.

Floppy disks

Look for more price softness in these computer storage media. The typical 5¼-in. disk, for example, has already dropped by nearly 50% over the past two years (to less than $1.25 each wholesale), and more cuts loom ahead. Quotes are expected to average under $1 each this year as more than 50 firms battle it out—and more entrants in the market are on the way.

Research & development

Chances are your firm will be a bit more involved in research and development this year—with the overall average outlay expected to be up by close to 9%.

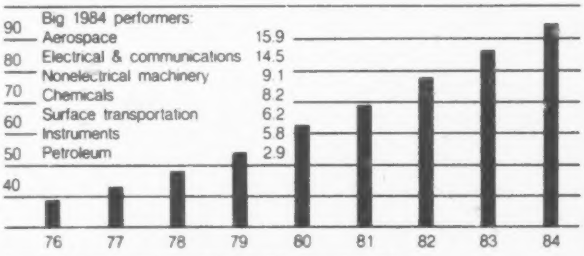
The estimate, based on a new Battelle study, also suggests that the cost of doing R & D will be going up—about 5% overall. Implication: Real purchases of R & D-oriented goods and services will be up some 3.7%—slightly higher than the 3.3% average rate of advance over the past ten years.

Among the industrial sectors, aerospace outfits will be doing the largest volume of work ($15.9 billion)—closely followed by another high-tech sector, electrical and communications ($14.5 billion). These and other big industrial performers of R & D are listed on the accompanying chart.

Another interesting trend: Industrial firms will be funding a larger share of the work—with less attributable to Uncle Sam. On the average, for example, less than 32% of the spending by manufacturers will be funded by the government (well under previous years).

Credit three factors for this increasing willingness for private firms to spend: (1) an improving general economic climate; (2) fewer barriers to cooperative research programs, such as dedicated research centers supported by groups of firms; and (3) recently enacted R & D tax incentives.

Research and development trends
Billions $

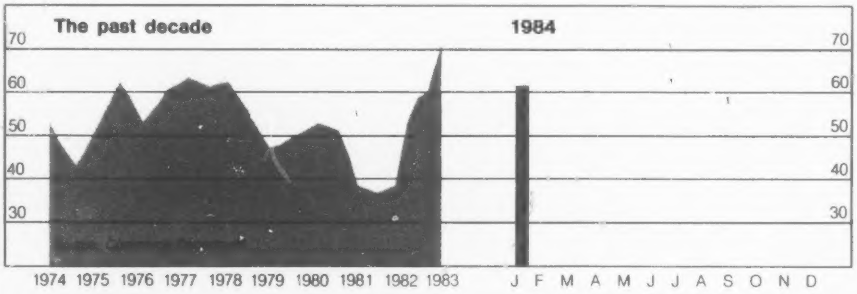


Source: National Research Foundation, Battelle Memorial Institute

BUSINESS DATATRAK

NAPM business barometer

Based on five indicators (employment, inventones, new orders, production, vendor performance)



KEY ECONOMIC TRENDS

Signs point to sustainable growth

Things still look good. True, the rate of growth seems to be slackening off a bit. But the 4%-or-so annual rate of real GNP advance anticipated for the next two quarters has to be regarded as quite satisfactory, considering the fact that the business upturn is now more than a year old.

The slowing down to more sustainable rates can best be appreciated by looking at the NAPM business barometer—a leading indicator of overall activity a few months down the pike. The latest reading is down a bit from the previous month. But at 61.1 (see chart above), this sensitive yardstick is 11 full index points above the neutral 50 mark.

Add in the still-positive readings from Uncle Sam's own index of leading indicators, and all the talk about the recovery running out of steam seems quite unrealistic.

But perhaps the most positive sign of continuing growth is the confidence being exhibited by hardheaded business executives. Their feelings and expectations—all summarized on the next page—suggest that nobody is even remotely thinking about a dropoff over the next few quarters.

That's not to say, of course, that there aren't problems. Certainly, the huge $180 billion budget deficit projected by the Administration for the next fiscal year is hardly cause for cheer. Neither are continuing high interest rates, which in large part, reflect this huge red-ink projection.

Another worry is the big trade deficit, with imports continuing to eat into domestic vendors' shares. Note from the chart, for example, that the deficit in recent months has been running at a close-to-$60 billion annual rate.

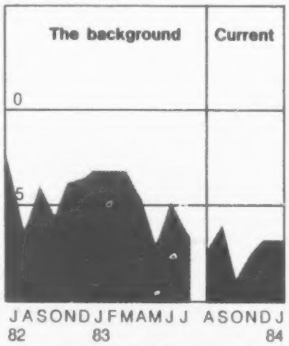
While these deficits (budget and trade) are likely to limit nearterm gains, they are hardly likely to lead to any new declines in overall business activity. One reason: Inventory/sales ratios remain near alltime lows, suggesting that no one on the manufacturing front is buying on speculation.

Another sign that all is still going well is the consistently high level of industrial distributor sales recorded in recent months (center chart). It clearly indicates that activity on the grass roots level is still holding up well.

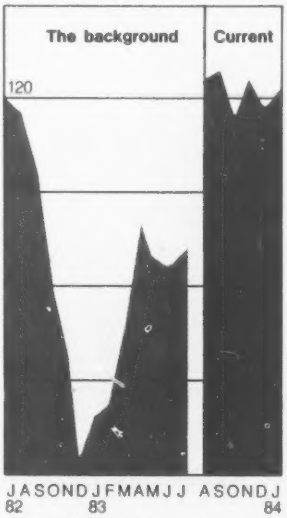
But perhaps the most optimistic sign of all is the continuing influx of new durable goods orders. They have been running at the $95-million-plus level for several months now—better than 15% above year-ago readings (bottom chart). The point to keep in mind here is that today's

Leading indicators

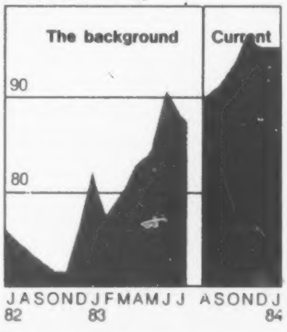
1. Trade deficit
Billions $, seas. adj.



2. Industrial distributor sales
Index: 1977 = 100



3. Durable goods orders
Millions $, seas. adj.



orders are tomorrow's production and the day-after-tomorrow's sales.

And if further evidence is needed to dispel talk of a slowdown, take a look at unemployment rates. At latest report, only about 8% of the workforce was out looking for a job—almost three full percentage points under the 10.7% high hit back in late 1982.

This improving job outlook, if nothing else, should sustain consumer buying. And judging from car sales, it is—with the latest monthly total showing auto purchases at near an 11-million-unit annual rate. That's the highest level in more than four years and well above the 9.2 million units that cleared the market in 1983.

Business leaders remain bullish

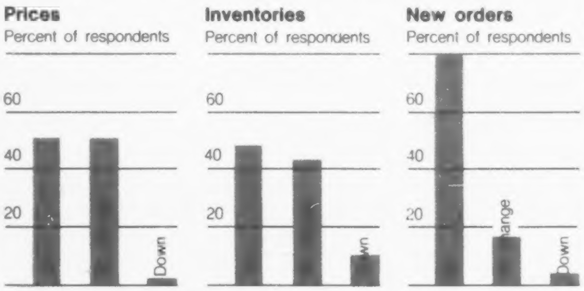
The nation's top business leaders are still bullish on America, despite the continuing high deficit and the fact that the recovery is now more than a year old. The evidence on this score is quite impressive:

- A new Conference Board survey of some 1500 chief executives suggests a confidence index of 74 (on a scale of 0-100), virtually matching the peaks of the previous two quarters.
- A Dun & Bradstreet survey of more than 500 manufacturers on first-quarter 1984 business expectations finds that some four out of every five respondents anticipate that both sales and orders will top year-earlier levels. Just three months ago, the comparable year-to-year figure was less than one out of every two.

As might be expected, the D & B study also points to a rise in inventories, with 47% seeing an uptrend in their overall holdings. But since this is well under the 80% who look for higher orders and sales readings, it suggests a continued tight rein on business stocks.

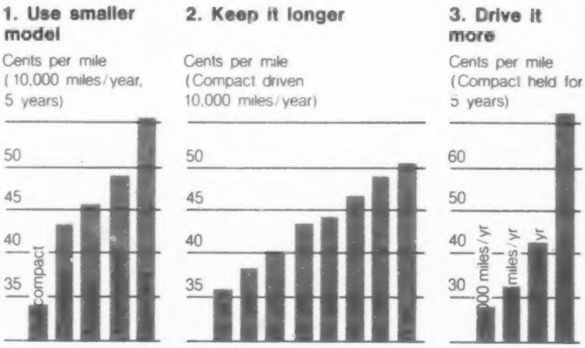
On the other hand, increasing activity will mean some upward price pressure. Nearly one of every two D & B respondents now anticipate that first-quarter prices will top year-earlier levels (versus only 38% when the comparable question was posed three months ago).

First quarter 1984: a vendor view*



* 1st qtr 1984 vs 1st qtr 1983 for all manufacturers
Source: Dun & Bradstreet

Three ways to cut car costs



Source: Hertz

Driving costs vary widely

The kind of car you own and how you drive it can make for a substantial difference in overall vehicle costs.

Just how much a difference is spelled out in a new Hertz study that analyzes cents-per-mile variations by size of auto, how long it's held, and how intensively it's driven:

- **Size of car:** Assuming a new car is held for five years and is driven 10,000 miles per year, the cost per mile can vary anywhere from 34.6¢ for a subcompact all the way up to 55.4¢ for a standard-size vehicle.
- **Length of time held:** Assuming a compact driven 10,000 miles per year, the costs can vary from 36.0¢/mile, if held eight years, up to 50.5¢/mile, if traded after only one year.
- **Mileage driven:** Assuming a compact held for five years, the costs can vary from 28.4¢/mile, if driven 20,000 miles per year, up to 73.9¢/mile, if driven only 5000 miles per year.

Of course, if you opt for a really favorable combination—a small car, held for a long time, and driven intensively—the savings differential can be even bigger. The 28.4¢/mile suggested for a compact held for five years and driven 20,000 miles per year is less than half the 63.3¢/mile indicated for a standard held for two years and driven only 10,000 miles per year.

Another interesting finding of the new report: The average cost of the typical new car fell last year for only the second time in history—dropping 1.4¢/mile, or 3.1%, to 43.3¢/mile.

CURRENT PRICES

Gradual advances expected

Price advances are finally beginning to accelerate a bit.

To be sure, the latest industrial wholesale price index increase (about 3% at annual rate) is hardly cause for alarm. But it does represent a shift from previous months when this bellwether yardstick of overall tags had remained virtually unchanged.

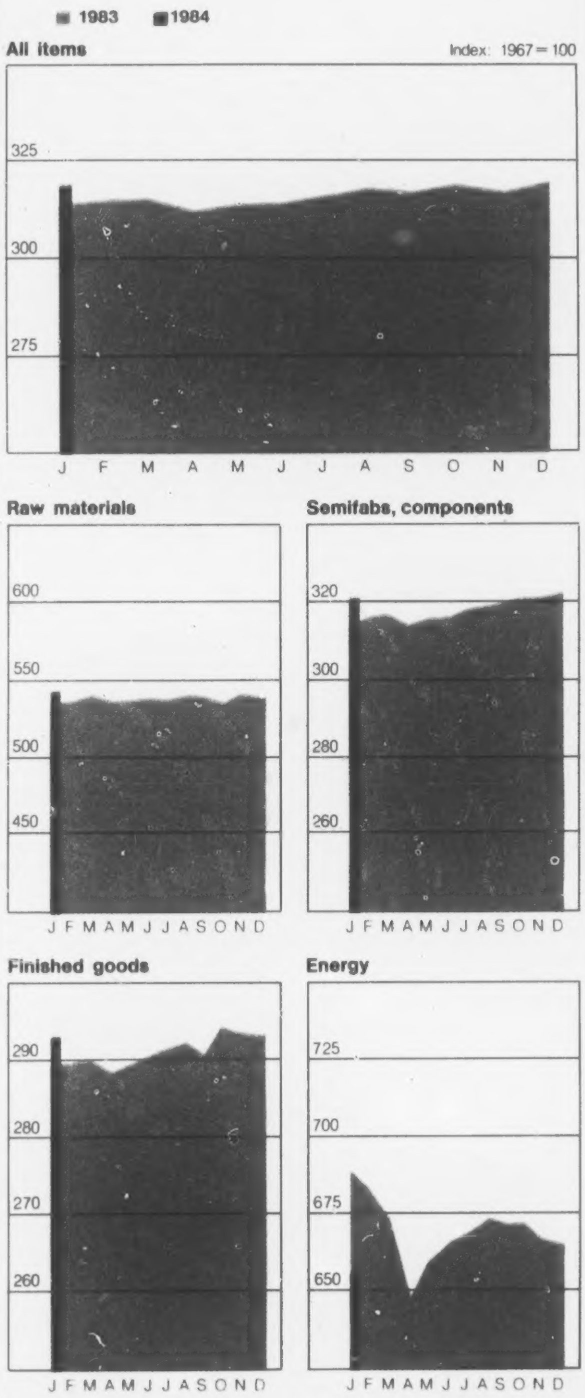
Most price analysts, however, have been expecting this kind of development as demand continues to improve and as more factories move a bit closer to their preferred operating rate levels. Indeed, one analyst feels that the latest increase is still quite encouraging. He notes, for example, that the consensus forecast for 1984 as a whole calls for an industrial price increase of near 5%—two percentage points higher than the latest reading.

In any event, increases for the most part are still quite moderate and, in many cases, are being offset by declines in other sectors. While industrial

This month's breakdown

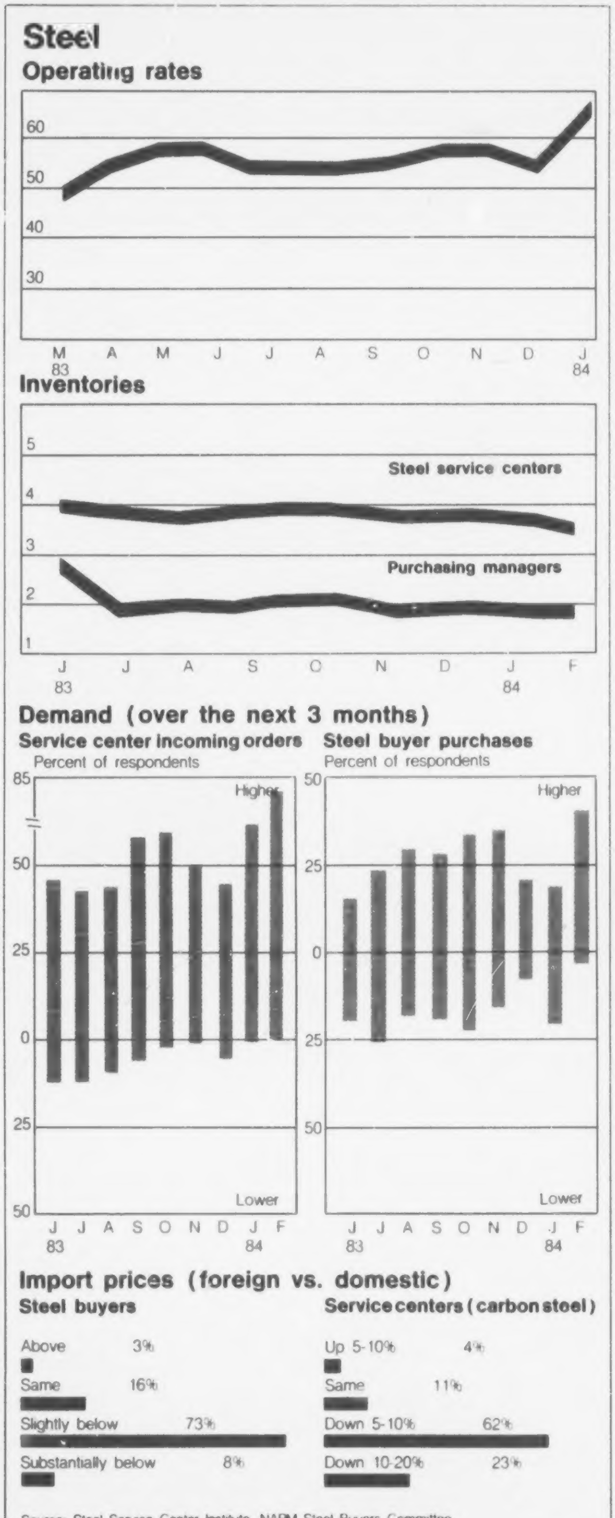
	Latest level (December)	% change from: Month ago	Year ago
Bearings	335.6	0.7	1.4
Bolts, nuts, etc.	271.0	0.0	0.6
Chemicals, inorganic	289.6	-0.3	-3.3
Chemicals, organic	376.1	1.2	5.1
Concrete products	305.6	0.6	2.1
Corrugated cartons	249.3	0.0	3.1
Cutting tools, small	279.9	0.4	1.1
Electrical instruments	274.8	0.0	7.9
Electric lamps (bulbs)	331.4	1.3	11.4
Electronic components	188.2	0.6	5.4
Fans and blowers	337.6	0.5	0.2
Foundry and forge products	354.4	0.4	2.2
Fuel oil (residual)	1164.8	-1.7	10.2
Furniture, commercial	290.8	0.1	3.5
Gasoline	570.3	-2.9	-9.3
Glass, flat	229.5	-0.2	-0.1
Glass containers	351.0	0.0	-1.6
Gypsum products	328.5	2.2	24.9
Hand tools	352.9	0.5	1.6
Hand tools, power driven	222.2	0.6	0.5
Industrial furnaces	370.2	0.3	3.7
Integrating and measuring instruments	225.8	0.1	3.9
Internal combustion engines	344.3	0.5	2.2
Lubricating oil	749.9	0.8	-3.1
Lumber millwork	308.5	0.0	5.0
Material handling equipment	287.0	0.2	0.5
Metal containers	345.5	1.9	5.1
Metal mill shapes (nonferrous)	315.2	-0.1	2.6
Metal tanks	304.9	0.3	-0.8
Motors and generators	337.3	0.4	5.1
Motor trucks (10,000 lb and under)	280.4	0.1	2.5
Office and store equipment	155.8	0.6	1.1
Paperboard	262.2	1.0	7.8
Paper boxes and shipping containers	252.6	0.2	1.7
Paper office supplies	231.5	1.8	2.1
Paint	265.7	0.3	0.4
Plastic resins	304.2	2.0	7.2
Precision measuring tools	245.4	0.4	1.3
Pumps and compressors	346.1	-0.1	1.1
Refractories	355.0	0.2	5.1
Rubber belts and belting	332.2	-0.6	2.8
Scales and balances	228.0	0.1	0.0
Steel products	268.8	-0.2	1.1
Switchgear	359.3	0.9	5.2
Textiles, synthetic fibers	159.2	0.6	1.6
Textiles, gray fabrics	152.8	0.7	5.8
Tires and tubes	242.9	0.0	-4.8
Transformers and power regulators	223.4	-0.2	1.4
Welding equipment	276.1	1.1	-1.1
Wire and cable	201.8	0.1	0.3

Industrial prices at a glance



Source: Bureau of Labor Statistics

BUSINESS DATATRAK



Source: Steel Service Center Institute, NAPM Steel Buyers Committee

chemicals, plastic resins, paper, steel, and some textiles moved up, for example, there were some modest declines in such other basic raw materials as copper, tin, and precious metals.

Construction materials also tended to edge higher, with modest increases posted for gypsum, fabricated structural metal products, plywood, and lighting fixtures. But even here, there were some offsetting declines—namely in concrete products, lumber millwork, plastic construction products, and insulating material.

There was also a tendency for component parts to advance. Heading toward higher price ground, for example, were bearings, rubber hose, cutting tools, precision measuring tools, motors and generators, and internal combustion engines.

STEEL SCENE

Optimism keeps growing

It's beginning to look more and more like a really good steel year. At least that's what buyers and service centers are telling survey takers these days.

Indeed, both groups are actually more optimistic now than they were through most of 1983. Some 41% of the buyers queried by the NAPM Steel Committee expect to increase their receipts of the metal over the next three months. That's the highest such figure since last spring—and far above the miniscule 3% who are thinking about cutting back.

Distributors are even more optimistic, with four out of every five Steel Service Center Institute (SSCI) members anticipating an increase in their order books over the next three months. And not a single respondent is talking in terms of a decrease. Again, the figure represents the highest level since last spring.

The current bullishness is summed up by SSCI President Andrew G. Sharkey, who feels member sales volume will be up 10% in 1984 (to near 19 million tons). Median tonnage gains in key product lines are projected as: flat-rolled products (10%); stainless (7%); bars, tubulars, plate, and structurals (8%).

Sharkey adds that the survey findings suggest the biggest market gains will come in the general manufacturing, machinery, defense, and aerospace categories. Smaller upturns are seen for construction (both commercial and industrial), the oil and gas industries, agricultural equipment, shipbuilding, and forest products. There is also some doubt, he adds, as to whether appliance, auto, and truck manufacturers will be able to sustain the tremendous rate of growth that they enjoyed last year.

On a regional basis, service center executives in the Midwest and Great

Lakes areas express the most optimism. And West Coast centers (dealing with the aerospace industry) are the most bullish in the outlook for stainless. The least optimistic projections come from the South.

Adding to the general steel bullishness is the fact that the inventory overhang which plagued the industry last year seems to be all but over. On the buyer front, for example, only about one out of five now think their steel stocks are too high (less than half the number who thought so a year ago).

The latest SSCI survey shows almost identical figures: Some 20% say their stocks are too high versus the 41% reading of a year ago.

The steel service center people also indicate that this could actually result in some modest inventory buildup. True, the 25% who say they will be attempting to increase stocks over the next three months isn't all that much above the 20% who contemplate reductions. But it does represent the first time in several years that accumulators will be outnumbering the parers.

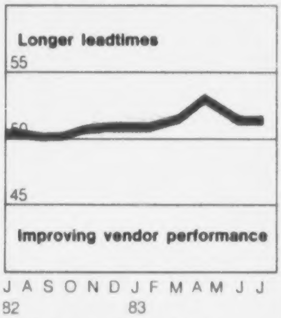
The improving market also shows up in the scatter of concern about near-term availability. Items mentioned more than once include cold-rolled sheet, coated sheet, rod and wire, and stainless. While the actual number of such products is still relatively small, it does suggest that some closer monitoring of leadtimes may be in order.

The surveys, meantime, show a relatively mixed picture as far as import bargains are concerned. Service centers, for example, note there has been a substantial drop in carbon steel coming in at 10-20% under comparable domestic levels. Less than one out of four now reports such buys—far under the nearly three out of four who reported such bargains last spring.

Monthly procurement status report

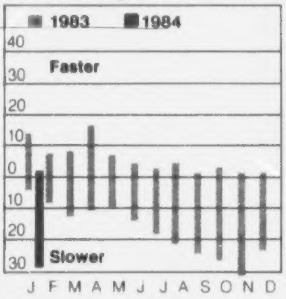
Leadtime index

A 'diffusion' index based on 158 key commodities. Above '50' indicates a tendency for leadtimes to stretch out. Below '50' suggests improving vendor performance.

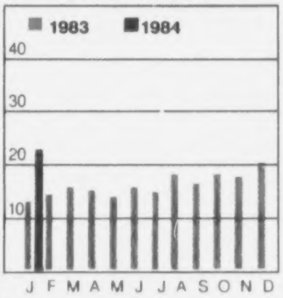


Delivery performance

Percent reporting deliveries

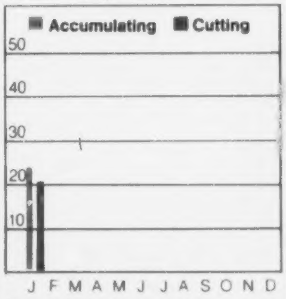


Forward commitments



Inventory strategy

Percent of respondents



Source: NAPM

PROCUREMENT STATUS

Another month of slower leads

Add yet another month to the slow but steady deterioration in vendor leadtime performance.

As in recent months, developments have not been all that dramatic—spotty and small, rather than across-the-board and large. Yet, on average, this continuing trend has probably been enough to add close to a week onto delivery rates over the past 6-12 months.

Another sign of the times: About one-third of the close-to-200 product lines regularly monitored by ***PurchasingWorld*** now sport some delays vis a vis last summer's levels. Items that have tended to stretch most include electronic components, a wide variety of paper lines, steel, and some nonferrous shapes.

Equally significant, ***PW'***s own leadtime index (a compendium of all items studied) continues to register above the neutral 50 mark, where declines and extensions balance each other. Indeed, you have to go back more than a year to find a reading in the 50-or-under category.

The same picture is suggested by NAPM's speed-of-delivery measure. At latest report, some 29% were reporting some slowdowns—27% percentage points more than the 2% who noted some improvement. Again, this has been an ongoing trend, with those reporting slowdowns outpacing those noting speedups for 12 consecutive months.

Leadtimes and availability

Chicago: Some extensions in the electric/electronic area (to these weekly leads): capacitors (12-20), coils (4-16), printed circuit boards (8-16), and semiconductors (13-52). Paper leads are out to 3-6 weeks, but should be back to a normal two weeks by summer. Metals are mixed: Light steel plates are out, but steel sheets are in a bit.

Cleveland: Fractional extensions (to these new weekly leads) are reported for maintenance paint (3), polyethylene (3), PVC resins (3), and cold-finish aluminum (13). Other relatively unchanged leads include two-ply fiber drums (2), steel canisters (6), strapping (2-3), plastic packaging (3), lumber (3), and skids (3).

Los Angeles: Several changes—mostly extensions. Out (to these new weekly leads) are galvanized steel (20), electromechanical devices (8-10), specialty wire (6), fasteners (6), stainless steel (16), heavy-duty steel (14), and passive electronic components (24-32). Coming in are copper fittings (3-5), computer peripherals (12-16), and paints (4-6).

BUSINESS DATATRAK

Houston: Some slight leadtime declines (with new monthly levels in parentheses) are noted for field fabricated pressure vessels and towers (6-14), shop-fabricated steel pipe (3-6), and structural steel (3-4). But some overall stretchouts are indicated by summer, based on more inquiries and an expected pickup in oil rig demand.

Philadelphia: A mixed picture here. Extending out (to these new weekly leads) are styrofoam molded shapes (3), corrugated shipping containers (3), polyethylene plastic bags (3), stainless bar from mills (12 for hex and 10 for round), and stainless round coil from mill (14). Coming in are wooden pallets (1) and xerographic paper (½).

Pittsburgh: Pretty much of an unchanged pattern here, with these typical weekly delivery delays: multiwall bags (6), plastic bags (3-4), corrugated and folding cartons (3-4), all types of drums (1), lumber (3-4), plastic packaging material (2-3), steel strapping (2-3), polyethylene and PVC resins (5), lead (2), and zinc (6).

Leadtimes (in weeks)

STEEL	Now	Month ago	Six months ago
Sheet (Phil)	9	7	7
C-R Sheet (Chgo)	8	8½	10
Plate (Phil)	10	10	4½
Plate (Chgo)	4	4	2½
Reinforced (Hous)	6	6	6
H-R Bars (Phil)	4½	4½	4½
H-R Bars (Chgo)	3	3½	2½
Cold-Drawn Bars (Phil)	4½	4½	4½
Galvanized (LA)	20	11	6
Galvanized (Chgo)	7	7	7
Structurals (Chgo)	2½	2½	2½
Structurals (Hous)	17	15	17
Tubing (Phil)	7	7	6
Greyiron Castings(LA)	6	6	12
Steel Castings (Hous)	11½	11½	11½
Forgings (Hous)	7	7	7
Pipe, Carbon (Hous)	13	13	13
ELECTRIC & ELECTRONIC			
Cables (Chgo)	8½	8½	8½
Capacitors (Chgo)	16	14	13
Circuit Breakers (Chgo)	6	6	6
Electromech. Devices (LA)	9	7	8
ICs (Linear) (Phil)	20	20	11
Motors (Phil)	21	21	21
Motors, 1000 hp & Up (Hous)	39	39	39
Printed Circuit Boards (Chgo)	12	10½	7
Relays (Chgo)	15	15	15
Resistors (Chgo)	10	10	10
Resistors, Wirebound (Phil)	9	9	10
Transformers (Chgo)	10	10	10
LUMBER			
Hardwood (Pgh)	3	3	3
Hardwood (Clev)	3½	3½	3½
Plywood (Chgo)	1½	2	2
Plywood (Phil)	1½	1½	1½
Softwood (Clev)	3	3	3
Softwood (Phil)	1/5	1/5	1/5
Softwood (Pgh)	3	3	3
Particleboard (Phil)	2½	2½	2½
CHEMICALS-PLASTICS			
Adhesives (LA)	½	½	½
Naphthalene (Chgo)	2	2	2
Paint (LA)	4	4	4½
Paint, Coil Coating (Pgh)	4	4	4
Paint, Maint. (Clev)	3	2½	2
Polyester Resin (LA)	2	2	2
Polyethylene Resin (Clev)	3	2½	2½
Polyethylene Resin (Pgh)	4	4	4
PVC Resin (Chgo)	2½	2½	2½
PVC Resin (Pgh)	4	4	4
Titanium Dioxide (LA)	1	1	1

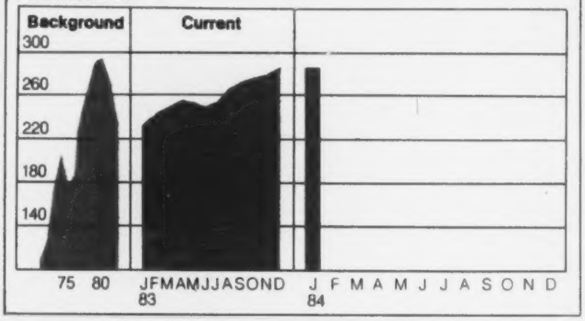
	Now	Month ago	Six months ago
PACKAGING			
Bags, Kraft (Pgh)	5	5	5
Bags, Multiwall (Clev)	9	9	9
Bags, Multiwall (Pgh)	6	6	6
Cartons, Corrugated (Clev)	3	3	3
Cartons, Corrugated (Hous)	3	3	3
Cartons, Folding (Phil)	6½	6½	6½
Cartons, Folding (Pgh)	3½	3½	3½
Cellophane Wrap (Phil)	5	5	5
Plastic Bags (Pgh)	3½	3½	3½
Plastic Pkg. (Pgh)	3	3	3
Shrink Film (Chgo)	4	4	4
Shrink Film (Clev)	3	3	3
Drums, Fiber (Pgh)	1	1	1
Drums, Steel, Std. (Pgh)	1	1	1
Wood Pallets (Chgo)	2½	2½	2½
Wirebound Boxes (Pgh)	4½	4½	4½
Strapping (Clev)	2½	2½	2½
Strapping (Pgh)	3	3	3
PAPER			
Fiberboard (Clev)	3½	3½	3½
Glassine (Clev)	4½	4½	4½
Glassine (Pgh)	5½	5½	5½
Groundwood (Clev)	4½	4½	4½
Groundwood (Pgh)	7	7	7
Kraft (Clev)	1	1	1
Kraft, Bleached (Clev)	1	1	1
Kraft, Bleached (Pgh)	5	5	5
Kraft, Natural MFNS (Clev)	1	1	1
Laminated (Clev)	8	8	8
Tissue (Pgh)	5½	5½	5½
NON-FERROUS			
Aluminum Coil (Chgo)	11	11	11
Aluminum Plate (Chgo)	9	9	9
Aluminum Sheet (LA)	4½	4½	6
Aluminum Sheet (Chgo)	14	14	11
Brass Castings (LA)	7	7	8½
Brass Rods (Chgo)	3½	3½	3½
Brass Sheet (Chgo)	13	9	5
Brass Tube (Chgo)	9	9	6½
Copper Fittings (LA)	3½	5½	5½
Copper Mill Prod. (Pgh)	6	6	6
Copper Tube (LA)	5½	5½	6
Copper Tube (Phil)	6	6	6
Lead (Pgh)	2	2	2
Magnesium (Pgh)	6	6	2
Manganese (Clev)	1	1	1
Nickel (Clev)	1	1	1
Nickel (Pgh)	2	2	2
Silicon (Clev)	1	1	1
Tin (Pgh)	3	3	3
Wire, Specialty (LA)	6	5	5
Zinc (Pgh)	6	6	2
MISCELLANEOUS			
Bearings, Domestic (Phil)	12	12	12
Bearings, Foreign (Phil)	26	26	26
Boilers & Furnaces (Hous)	35	35	35
Compressors, Centrifugal (Hous)	52	52	52
Compressors, Reciproc. (Hous)	39	39	39
Fasteners (Chgo)	1½	1½	½
Fasteners (LA)	6	4	4
Fasteners, Std. (Phil)	2	2	3½
Heat Exchangers, Carbon-alloy Steel (Hous)	20	20	20
Heat Exchangers, Hi-pressure (Hous)	21	21	21
Insulation Mat'l. (LA)	7	7	9½
Machined Parts (Hous)	9	9	9
Pipes & Valves (Chgo)	2	2	1½
Pumps (Hous)	39	39	41
Pumps (LA)	9	9	9
Rubber, Synthetic (LA)	2	2	2
Rubber Hose (LA)	4	4	6
Tungsten Carbide Parts (Hous)	15	15	15
Valves, Cast Steel (Hous)	6½	6½	8
Welding Supplies (Hous)	5	5	5

BUSINESS DATATRAK

Raw material price barometer

Latest month	283.6
Month before	282.4
Year ago	232.1

Index: 1967 = 100



Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	347.00	347.00	347.00
Steel, structural shapes, Pitts., cwt.	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt.	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt.	24.40	24.40	24.40
Steel, bars, dlvd. Phila., cwt., merchant quality	17.50	17.50	17.50
Steel, bars, Pitts, cwt.	17.50	17.50	17.50
Steel, bars, C.R., Pitts, cwt.	26.00	26.00	31.00
Steel, plates, Pitts., cwt.	23.25	23.25	24.25
Steel, plates, H.R., Pitts., cwt.	20.80	20.80	20.80
Steel, sheets, C.R., Detroit, cwt.	27.10	27.10	24.65
Steel, strip, C.R., Chi., cwt.	35.30	35.30	29.05
Steel, basic wire, Pitts., cwt.	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	0.745	0.760	0.555
Antimony, in alloy, lb.	2.00	2.00	2.00
Beryllium-copper, cost ingot, lb.	5.20	4.95	4.95
Brass, red, 85%, [sheet], lb.	1.22	1.22	1.26
Brass, yellow, [sheet], lb.	1.17	1.17	1.20
Cadmium, ton lots, lb.	1.25	1.25	1.00
Copper, electrolytic, wire bars, refd., lb.	0.68	0.68	0.79
Copper sheet, over 24 in., lb.	1.31	1.31	1.35
Lead, common, N.Y., lb.	.240	.250	.205
Magnesium, pig ingot, [99.8%], lb.	1.43	1.43	1.34
Mercury, 20 fl. lots, N.Y., fl.	292.00	315.00	375.00
Molybdenum Climax Oxide/bags, lb.	4.65	4.65	4.40
Nickel, electrolytic, producer, lb.	3.20	3.20	3.20
Platinum, producer, oz.	475.00	475.00	475.00
Silver, N.Y., oz.	8.75	8.20	13.90
Tin, Straights, N.Y., lb.	6.23	6.25	6.37
Zinc, Prime West, East St. Louis, lb.	0.51	0.49	0.40
Zinc, die casting alloy, No. 3, lb.	0.585	0.555	0.465
PAPER			
Uncoated book 13 offset, ton	810.00	810.00	800.00
Watermarked bond, ton	915.00	915.00	845.00
Gummed sealing tape, carton	15.45	15.45	15.70
Boxboard, mach. clay ctd. recycled sheets 80 bright, .016, ton	475.00	475.00	475.00
Wrapping paper, std. distribution cost, kraft, basis wt. 50 lb., roll	28.00	28.00	28.00
Kraft linerboard, 42 lb., unbleached, ton	320.00	290.00	250.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd.	0.301	0.315	0.236
Cotton drill, 1.85, 59", 68x49, N.Y., yd.	1.02	1.02	0.95
Cotton middling, 1", N.Y., lb.	0.697	0.694	0.611
Printcloth, 48", 80x80, N.Y., spot. yd.	0.850	0.840	0.610
Army duck, 37", 13 oz., yd.	1.79	1.79	1.60
Blended printcloth, 64", 78x54, yd	0.72	0.71	0.66
20s combed yarns	2.14	2.14	1.68
Wool tops, N.Y., lb.	3.60	3.60	3.60
CHEMICALS			
Acrylonitrile, tanks, lb.	0.43	0.43	0.43
Ammonia, anhydrous, fertilizer, wholesale, tanks, ton	195.00	195.00	210.00
Benzene, petroleum, tanks, Houston, gal.	1.40	1.41	1.45
Caustic soda, 76% solid, drums, carlots, cwt.	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb.	0.58	0.58	0.66
Formaldehyde, USP, 37%, [12% to 15% meth.], tanks, lb.	0.106	0.106	0.101
Glycerine, synthetic, tanks, lb.	0.810	0.810	0.730
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	0.450	0.450	0.715
Naphthalene, crude, tanks, lb.	0.22	0.22	0.22
Phthalic anhydride, tanks, lb.	0.305	0.305	0.265
Polyethylene resin, low density liner film grade (market price), lb.	.420	.420	.290
Polypropylene, homopolymer grade (market price), lb.	0.37	0.37	0.35
Polystyrene, general purpose grade (market price) lb.	0.40	0.40	0.36
Shellac, bone dry, N.Y., lb.	1.65	1.65	1.65
Soda ash, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	0.350	0.350	0.350
Sulphur, crude, ex-terminal, Tampa, Fla., lt.	132.50	132.50	135.00
Sulphuric acid, 66%, commercial, tanks, ton	56.35	56.35	56.35
Titanium dioxide, anatase, reg., carlots lb.	0.69	0.69	0.69
Xylene tanks, gal.	1.35	1.35	1.45
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	313.75	311.65	328.00
Lumber 2x2, pine, mbf, cl	314.05	310.60	311.60
Plywood, plyform, 3/4", msf, cl	559.55	551.20	539.95
Plywood, 5/8", msf, cl	348.50	350.75	340.65
Cement, bulk, ton, tl	62.35	61.78	63.18
Sand, ton, cl	6.15	6.12	5.92
Ready-mix concrete, 3,000 psi/cu. yd., 15 cu. yd.	45.80	45.75	45.93
Crushed stone, 1½", ton, cl	8.00	7.83	7.85
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.76	0.76	0.75
Gypsum sheathing, ½"x1"x8", msf. tl	198.97	192.50	158.15
Brick, common, per thousand, tl	172.50	171.83	172.35
Asphalt paving, AC-20	161.31	159.64	155.57
Concrete sewer pipe, 12", prem. joint, per foot, cl	6.79	6.79	6.76
FUELS			
Fuel oil, No. 6 or Bunker C. Gulf., bbl.	26.20	25.75	22.00
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	32.90	31.50	28.75
Gasoline, 91 oct., reg., Los Angeles, rack, gal.	0.738	0.810	0.775
Gasoline, 94 oct., reg., Chi., tank car, gal.	0.808	0.765	0.829
Heating oil, No. 2, Chi., bulk, gal.	0.854	0.835	0.770
Heating oil, No. 2, N.Y., bulk, gal.	0.825	0.878	0.828
Heavy fuel, PS 400, Los Angeles, rack, bbl.	26.25	26.25	25.30
Jet kerosene, gal.	0.825	0.860	0.830
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	0.460	0.460	0.450
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	105.00	98.00	67.00
Steel, No. 1, hvy., dlvd., Chi., ton	88.00	88.00	66.00
Copper, No. 1, East, wholesale buy, dlvd., lb.	0.590	0.585	0.655
Copper, No. 2, East, wholesale buy, dlvd., lb.	0.505	0.495	0.580
Brass, red, East, wholesale buy, dlvd., lb.	0.550	0.545	0.615
Brass, yellow, East, wholesale buy, dlvd., lb.	0.325	0.315	0.350
Alum., old sheet/cast, E., wholesale buy, dlvd., lb.	0.500	0.500	0.275
Alum., mixed clip., E., wholesale buy, dlvd., lb.	0.515	0.515	0.295
Zinc, old, East, wholesale buy, dlvd., lb.	0.185	0.185	0.075
Lead, clean solids, East, wholesale buy, dlvd., lb.	0.140	0.150	0.115
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	30.00	25.00	5.00
Paper, old corrug. box, dlr., N.Y., ton	25.00	21.00	4.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb.	0.130	0.110	0.110
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb.	0.34	0.33	n.a.

[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]

WHAT PMs ARE THINKING

Buyers keeping inventories tight

Business activity may be moving up, but purchasing managers are still keeping a tight rein on inventories. In fact, they've actually reduced days' supply in many instances.

Equally significant, the vast majority of buyers queried in a nationwide ***PurchasingWorld*** survey expect things to continue that way through the remainder of the first half and into next fall and winter. Indeed, any increases in actual tonnage levels are expected to be more than offset by further production and sales gains.

These findings are also confirmed by official government statistics. The plunge in Uncle Sam's overall manufacturing inventory/sales ratio to 1.44 in late 1983 marks the lowest this ratio has ever fallen (except for the first three months of the Korean War).

The reasons aren't too hard to find. Purchasing executives are putting increased emphasis on just-in-time or zero-inventory programs—with better scheduling also getting a big assist from expanding computer technology.

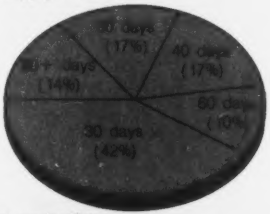
Then, too, there are a couple of good economic reasons for this close-to-the-vest stance. Very few items (except for some selective electronic components) are in short supply. Then there's the high price of money, making the cost of carrying more than just the bare minimum prohibitively expensive.

Here's how purchasing managers see the inventory picture shaping up:

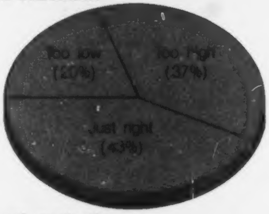
- **Current holdings:** Close to two out of every five respondents still characterize their inventories as being too high (versus only 20% who feel they need some beefing up). Implication: no new, big inventory buying spree.
- **Current days' supply:** The overall "keep 'em trim" trend is also verified by the fact that 43% report their days' supply is now lower than it was some six months ago—far outweighing the 18% who note an increase in this key ratio. Also indicative of a tight-fisted approach: More than half the respondents say they now carry a 40-day supply or less.
- **Future plans:** While roughly three out of five queried buyers project some increase in stock tonnages, almost all add that the increases will be quite modest and just about in line with expected increases in company activity.
- **Price hedging:** The foregoing, however, won't preclude some advance buying to beat expected price boosts. Some 57% of the respondents admit to taking this tack, with the items most often mentioned being paper, plastic resins, chemicals, motors, castings, diesel engines, aluminum, steel, and special ceramics.

PMs' view of inventories

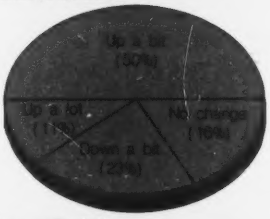
Days' supply on hand



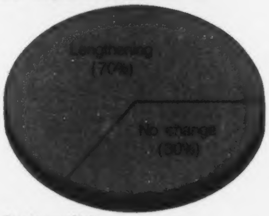
Current evaluation



Six-month projection



Leadtime expectations



Source: PurchasingWorld

- **Strike hedging:** Much less of this is going on, with only about 15% buying future protection against possible work stoppages. About the only big worry is an East Coast dock strike, which could temporarily cut off imports.
- **Leadtimes:** Despite the generally adequate supply situation, the majority of PMs queried seem resigned to some delivery stretchouts. Items most often mentioned here include electronic parts, packaging, flat-rolled steel, stainless steel, paper, machined parts, DC motors, brass, bearings, and heat exchangers.
- **Inventory carrying costs:** The most typical estimate here is 24% a year (about 2% a month). That's certainly a big enough figure to put downward pressure on inventory levels.

But whatever the reason for keeping stocks low, responses of purchasing managers suggest that they're leaving no stone unturned in an effort to drop days' supply figures even lower. Some of the approaches noted: (1) shifting more of the burden onto suppliers via longterm contracts and consignment shipments; (2) narrowing product lines, which, in turn, means the stocking of fewer parts; (3) more frequent reviews of inventory levels; (4) refusing to increase inventories until new orders have actually been received by sales; and (5) more implementation of MRP procedures.

Equally significant is the greater stress being put on closer and better vendor-buyer relationships—including detailed communications on future needs and the monitoring of supplier workloads and leadtimes.

The situation is probably best summed up by one Midwestern purchasing executive who notes, "We learned during the recent recession that we could live with a lot lower inventory, and given the economic facts of life today, there's little incentive to go back to our old, expensive habits." ***PW***

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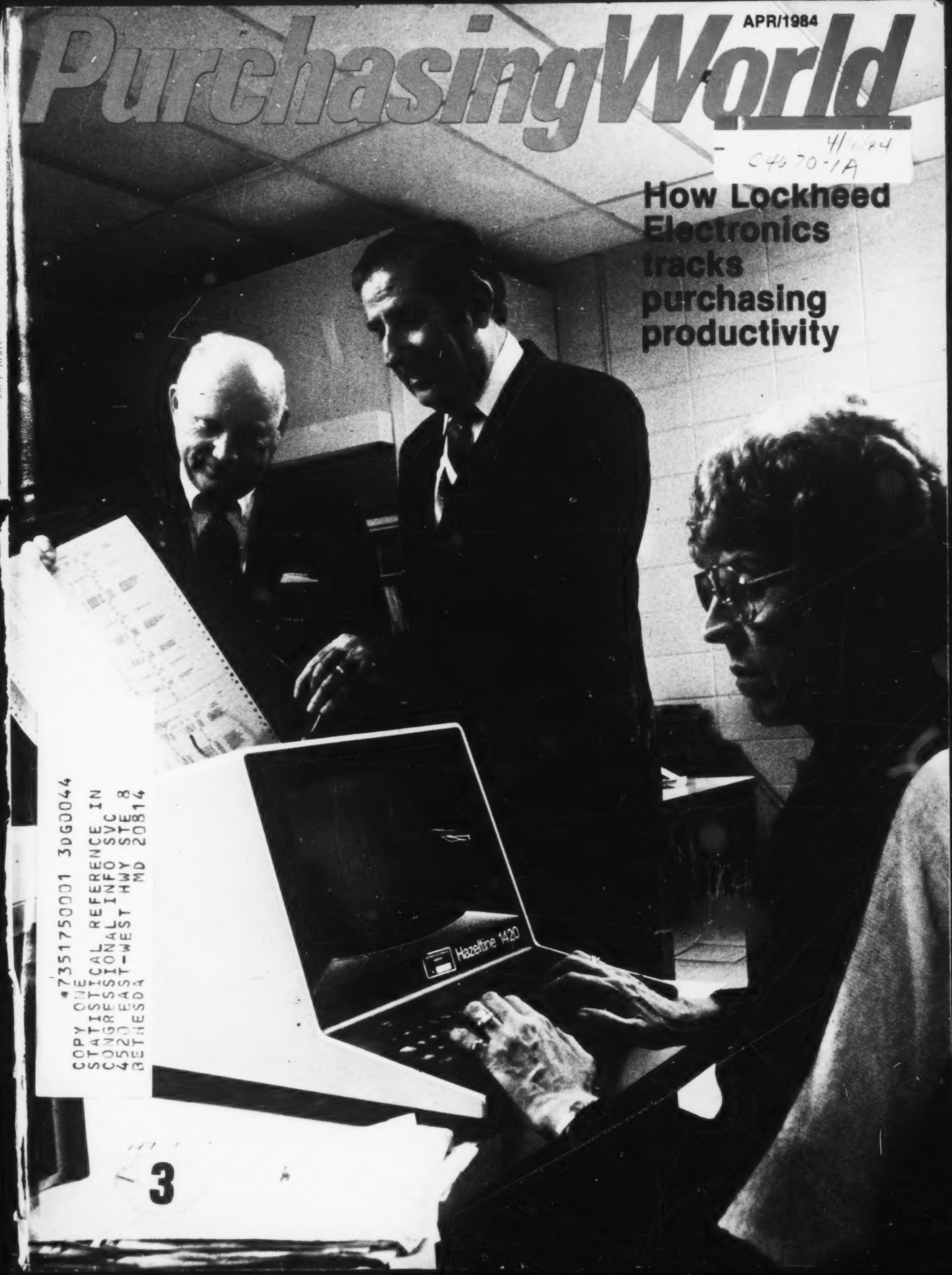
How Lockheed Electronics tracks purchasing productivity



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PurchasingWorld®

Helping you manage the business of buying

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Can purchasing productivity be measured? Yes, according to Michael A. La Placa, purchasing director at Lockheed Electronics Co. La Placa is pictured on our cover with John Beacham, manager of purchasing administration (left) and Peggy Dillon, purchasing administrator, who is entering information into a computer from buyers' weekly reports.

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Fast-changing technology, lengthening leadtimes, and the need for higher quality standards are posing new challenges for electronics buyers.

52 A tough year to forecast
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56 Carriers caught in cost-price squeeze
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83* Buyers plan more import activity
Use of imported products and materials will continue to grow in 1984, according to our latest survey of top industrial buyers.

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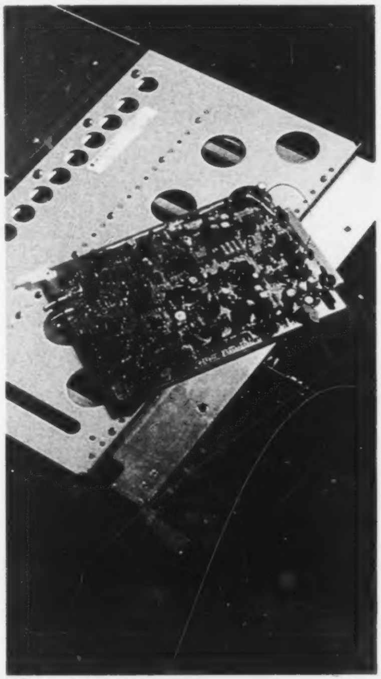

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PurchasingWorld (USPS 472 470) is published monthly by Huebner Publications, Inc., 6521 Davis Industrial Parkway, Solon, OH 44139. Printed in USA. Subscriptions: Available without charge to qualified purchasing executives in US manufacturing companies. Available to others in the US for $46/year, Canada $56/year. No subscription agency is authorized by us to solicit or take orders for subscriptions. Second class postage paid at Cleveland, OH, and additional mailing offices. Circulation and business offices: 6521 Davis Industrial Parkway, Solon, OH 44139. Editorial offices: 800 S. Northwest Highway, Barrington, IL 60010.
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ISSN 0093 1659

Postmaster: Send address changes to **PurchasingWorld**, 6521 Davis Industrial Parkway, Solon, OH 44139

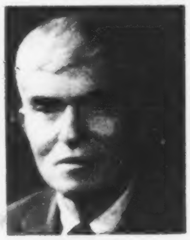
PW PREDICTS

Robert S. Reichard, executive editor

Signs point to price runups

Slow price acceleration now seems to be the order of the day.

At least, that's what some of the nation's leading inflation yardsticks are signaling. For example, Uncle Sam's industrial wholesale price index moved up at about a 4% annual rate over the first quarter. That's noting earthshaking, to be sure, but it does represent a significant change from the near-level readings that prevailed through most of last year.



Purchasing managers responding to the latest NAPM Business Survey Committee query tell much the same story. More than 40% of the buyers say they've been socked with price increases in recent months. That's in marked contrast to the first quarter of last year when the comparable percent of PMs noting increases came to only about 13-14%.

The recent price speedup in basic raw materials such as paper, plastics, and some metals also suggests higher overall averages in the months immediately ahead. Sooner or later, these grass-roots-level boosts will have to be passed along in the form of higher asking prices on more-highly-fabricated lines.

Finally, some of the basic economic forces are also pointing to a modest stepup in the overall inflation pace: (1) Food prices are not likely to remain quite as stable as they did last year, when the average supermarket bill advanced a miniscule 1%; (2) oil prices are now bottoming out—in contrast to last year's decline; (3) factory operating rates are now up in the respectable 80% level—well above the 71% level of just one year earlier; and (4) the U.S. dollar is likely to decline.

On the last point, some financial analysts now feel the German mark and Japanese yen could appreciate relative to the dollar by 15% and 10%, respectively, this year. This is not insignificant.

Michael K. Evans of Evans Economics, for instance, estimates that for every 10% change in the exchange rate, there's a 1% change in the overall inflation rate. Thus, if the dollar depreciates 10% this year, it would result (other things being equal) in about a 1% increase in the overall U.S. price level as imports become more expensive and as competitive pressures on U.S. vendors ease a bit. And if Evan's estimate that the dollar is 30% overvalued is anywhere near correct, the long-term upward impact on prices could be as much as 3%.

None of this is meant to imply that prices are about to spiral out of control. Two of the nation's largest econometric models (DRI and Wharton) are pretty much in agreement on this point. Indeed, average both firms' estimated industrial price increase for 1984, and you wind up with about a 4.1% advance. That's not all that bad—though still well above last year's small 1.1% boost. And even next year's estimated 6% advance is still in the tolerable range.

Reinforced plastics

Reinforced plastics may well be on the list of new materials you'll be shopping around for over the next few years.

Current and projected demand levels for these versatile synthetic materials would certainly seem to indicate as much. All told, the industry hopes to sell 2.155 billion lb in 1984. That's 12% above last year, which was a whopping 26% above depressed 1982 levels.

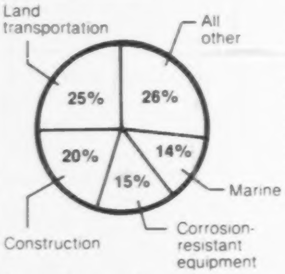
The biggest 1984 gain will be in the land transportation sphere, which already accounts for about one-fourth of the entire industry's output. Continuing increases here are attributable not only to higher auto production, but also to improved materials, innovative production techniques, and new applications.

On the latter score, for example, there are now station wagon load floors molded of glass reinforced polypropylene and new air springs that depend on three plastic components to make them practical at a far lower cost than machined aluminum. And under development are (1) continuous glass-fiber-reinforced transmission supports, (2) a composite rear axle, and (3) composite wheels.

Other big 1984 use increases are anticipated for aircraft (16%), appliances and business equipment (16%), consumer products (12%), marine applications (12%), corrosion-resistant equipment (11%), and electrical and electronic applications (11%).

Reinforced plastics

Projected 1984 usage
(% of total market)



Change in demand
(1984 vs 1983)

Land transportation	18%
Appliances, business equipment	16%
Aircraft	16%
Consumer products	12%
Marine	12%
Corrosion-resistant equipment	11%
Electric & electronic applications	11%
Construction	6%

Source: Reinforced Plastics/Composites Institute

PW PREDICTS

Steel

CURRENT SITUATION: The bellwether metal is off to a fast start. Sparked by sheet, March shipments hit 7 million tons—the highest level in 2½ years. And prices are following suit **with discounts gradually beginning to narrow.** Buyers, for example, have only been able to get $30-40/ton off the $550/ton list for Class 1 c-r sheet—well under the $80/ton discounts of late last year.

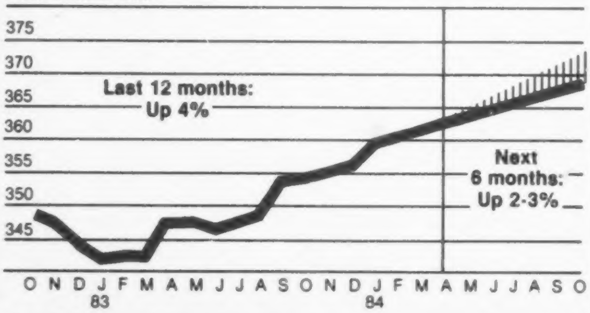
DEMAND: While some slackening from the current pace is likely, **the industry remains confident it can ship 78-80 million tons**—far above the disappointing 67.5 million that cleared the market last year. **The best showing will again be in consumer-oriented sheet and strip products.** But plate, bar, and heavy structurals should also begin to pick up if projections for a strong, 10% real gain in capital spending materialize. **As for 1985, preliminary estimates suggest about an 81-84 million-ton year**—a range that assumes a 2-3% gain in GNP.

SUPPLY: Some spotty tightness in sheet products is possible as most sheet mills will operate 80-100% of capacity. **Overall, however, there should be a minimum of trouble.** The industry as a whole is unlikely to operate much, if anything, above the 80% level this year. **Also, there's plenty of excess overseas capacity**—especially in Third World nations like Korea, Taiwan, Brazil, Argentina, and Mexico.

PRICE OUTLOOK: The trend is up—but by just how much depends on your frame of reference. Transaction prices will rise significantly. List levels, on the other hand, won't be advancing all that much. Some boosts in official book levels are possible by midyear. Behind the uptrend: (1) improving demand, (2) further reduction in U.S. capacity, and (3) a declining dollar (which will tend to raise import prices). **Look for a 2-3% boost in the list-oriented steel mill product price index over the next 6 months, with 1984 as a whole up about 6%.**

Steel mill products

Index: 1967 = 100



Copper

Markets are a bit firmer than they were a few months back, aided by a modest drop in LME and Comex stocks and expectations of about a 5%-or-so increase in 1984 U.S. refined consumption (to 2.2 million tons). But that still would leave totals far under the 2.4 million average of 1978 and 1979. And as for inventories, they'll have to drop a lot more to warrant the 90¢/lb price that domestic producers say they need to break even. Right now, 80¢/lb looks possible by midyear—and even that's far from a sure thing.

Chlor-alkalis

Be prepared to pay as much as $25/ton more for chlorine, with quotes moving up into the $195-200/ton range. Chlorinated solvents are also moving up—by 3¢/lb. But coproduct caustic soda seems to be heading in the other direction—down. In any event, recent attempts to post a $10/ton increase here have largely been unsuccessful. Indeed, spot prices as low as $75-80/ton have been reported on the Gulf Coast in recent months.

Computers

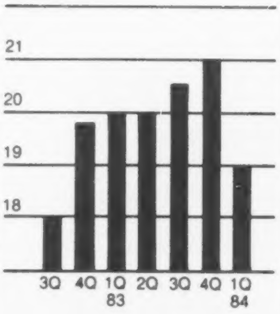
Tags on portable types should begin to edge lower now that IBM is coming out with a version designed to sell for just under $2800. Sign of the times: Some Japanese models are already going for as little as $2000. On a less optimistic note: Be prepared to pay through the nose for computer repairs. Recent surveys suggest you will have to budget anywhere from $150-300 for a repairman's visit. Labor charges alone run anywhere from $45-100/hr. Another disconcerting fact: A system in heavy use will normally require 2-5 service calls per year.

Ethylene

Look for new attempts to boost prices above the first quarter's 19¢/lb level. Some producers are talking in terms of a 3-4¢/lb hike (into the 22-23¢/lb range) by the end of the year. But this may be far too bullish—especially if the demand doesn't rise a few billion pounds above the 28.6-billion-lb level of 1983. Also keep in mind that there's still plenty of reserve capacity around, with output potential currently estimated to be as high as 38 billion lb/year.

Ethylene price

(cents/lb)



Aluminum

Offsetting trends here. While recent boosts have been posted on common alloys, rod, and bar, ingot seems to be taking a breather, with little tonnage changing hands at book levels. But this has to be regarded as a temporary phenomonon, as continuing demand gains eventually push ingot up again—most likely into the 80-85¢/lb range by fall. Underlying bullishness is confirmed by new forecasts. Both Free World and domestic demands are expected to rise 8% this year. Inventories (off 30% over the past year both here and abroad) also suggest buoyancy.

Lead

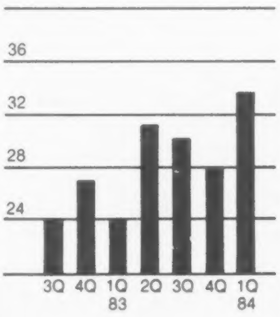
Fundamentals remain bearish. True, domestic consumption rose 2.2% last year (to 1.13 million metric tons). But Free World output could be up as much as 5% (to 4 million metric tons). Upshot: As much as 200,000-metric-ton surplus—added onto already top-heavy inventories. In any event, it's hard to make a case for the metal climbing even into the upper 20s anytime soon.

Polyvinyl chloride

The early-1984 recovery is still gaining momentum. Prodded by a combination of strong housing demand, low inventories, high operating rates, and rising monomer costs, selling prices for both the pipe and general-purpose grades are now approaching 35¢/lb—far above the 25¢/lb readings of just a few months back. Also, discounts have pretty much disappeared. And further hikes seem inevitable as the industry heads for a big 10-15% demand gain in 1984—just about in line with last year's 13% increase.

PVC price

Pipe grade (cents/lb)



Low-density polyethylene

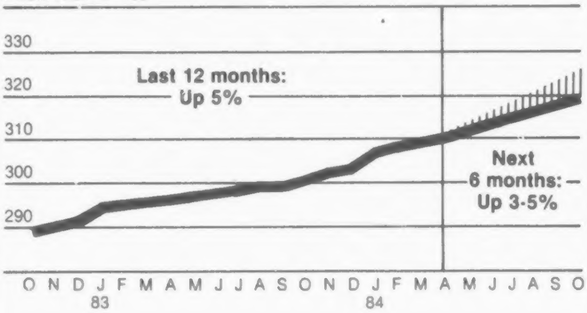
The liner grade has moved up to near 40¢/lb—a sharp 25% above year-earlier levels. And all signs point to further near-term advances, with quotes rising to the 45-46¢/lb range by sometime this summer. Credit the price pickup to rising demand from packaging and other markets, which has pushed LDPE operating rates above the 95% level.

Nickel

Count on prices staying in the low $2.20/lb range for another few months. Keep-

Paper and product prices (list price)

Index: 1967 = 100



CURRENT SITUATION: Early 1984 price increases attest to the industry's bullish nearterm outlook. Since late last year, tags have gone up across the board, with sizeable advances posted in linerboard, corrugated cartons, and most fine papers. Add in earlier boosts, and **some lines are not commanding upwards of 10% more than they did 12 months ago.** But perhaps the best indicator of a seller's market are today's high operating rates, with **most segments of the industry operating near or above the 95% level.**

DEMAND: Another big gain is anticipated on top of last year's big 9% advance over the recession-induced 1982 low and 4% above the previous high reached in 1981. Best bet: **a further 5-5½% increase into the 67½-68 million-ton range.** Most sectors will share in the gain, including newsprint (5½%), coated paper (5½%), unbleached kraft paper (3½%), linerboard (6%), bleached board (4%), and recycled board (5%). **A 4% gain in corrugated boxes** will bring totals into the 263-billion-sq-ft range.

SUPPLY: Leadtime stretchouts emphasize today's snug positions. Average 1984 output levels as a percent of potential are estimated as: newsprint—91%, coated paper—95-96%, unbleached kraft paper—96-97%, linerboard—98%, bleached board—94-95%, and recycled board—83-84%. **But improvements to equipment and increased capacity mean we should be able to scrape along without serious bottlenecks through 1986.**

PRICE OUTLOOK: It's no longer a question of whether tags will rise, but one of how much. Right now, the increases look to be moderate, because it will take time to digest recent hikes, and industry costs are not rising all that rapidly. **Count on a 6-8% increase for overall 1984. As for 1985, count on a similar advance,** although some second-half levelling is possible.

Industrial price trends

The big econometric forecasting models are beginning to signal a modest uptick in price increases.

A sampling of the latest quarterly printout from Data Resources, Inc., (see table) tells the story. True, there's no need to panic (most increases—even into 1985—look to remain well within the single-digit range). But the fact is that most product lines will be sporting somewhat bigger increases over the next year or two.

Blame it on (1) continuing demand gains (GNP will rise another 5.3% this year and 3.3% in 1985, according to the latest DRI estimate) and (2) the gradual drying up of excess factory capacity.

On the other hand, analysts at DRI remain basically optimistic that another inflationary spiral can be avoided, pointing out that wage increases—the engine of inflation—will remain quite modest. They predict, for example, that nonform wages will rise just 4.5% this year and 5.3% in 1985.

Price outlook through 1985

(Percent change, fourth quarter, year to year)

Pulp & paper (except building paper)	**1984/83**	**1985/84**
Crude construction materials	3.7	12.2
Processed fuels & lubricants	3.3	5.9
Integrating & measuring instruments	4.5	7.0
Plumbing fixtures	6.6	6.2
Insulation board	4.2	4.7
Nonferrous scrap	11.0	9.6
Laminated plastic sheets	5.5	4.9
Primary batteries	6.9	6.3
Electronic components	3.3	3.5
Machine shop products	5.7	9.0
Concrete products	6.3	9.4
Carbon steel bar (hot rolled)	6.9	6.8
Carbon steel strip (hot rolled)	5.2	6.5
Copper & brass mill shapes	15.6	7.9
Hardware	5.1	5.3
Fasteners	5.6	9.0
Pulp & paper (except building paper)	5.4	5.7
Tires	4.7	5.7
Prepared paint	4.8	4.5
Residual fuel	4.1	4.4
Metalworking machinery	7.8	6.9
Oil & gasfield machinery	5.1	7.9
Trucks	7.2	6.0
Special industrial equipment	7.0	11.2
Transformers & power regulators	5.7	6.8
Pumps & compressors	8.5	9.0

Source Data Resources, Inc., Cost Forecasting Service

ing domestic quotes down are a combination of factors, including: (1) the continued influx of low-cost foreign metal, (2) relatively high LME stock levels, and (3) still somewhat disappointing capital goods markets. But producers are now fairly optimistic on the demand front (at least as far as overall 1984 is concerned). They project a 100-million-lb gain in Free World consumption. This would bring total use up to near 1.2 billion lb (about 100 million above estimated 1984 production figures).

Electricity

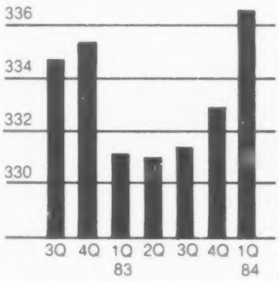
Brace for some rate acceleration following last year's surprisingly small 3% overall increase. Blame it on (1) a modest firming in fuel input costs following last year's fractional 1% fall, (2) a reduction in the availability of cheap hydro-power, and (3) the need to finance new generating facilities. All in all, these should combine to push average rates up about 7% this year, and perhaps 7-8% during 1985.

Bearings

Improving demand from machinery makers should give the industry a shot in the arm. The 1984 physical volume of shipments is expected to rise about 10%, in sharp contrast to last year's 3% decline. But low-price imports (expected to be up as much as 15%) should continue to limit price advances. Nevertheless, some upcreep is likely, with overall 1984 tags rising about 5% above depressed 1983 levels. And by next year, increases as high as 8% can't be ruled out if capital spending continues to pick up as expected.

Bearings prices

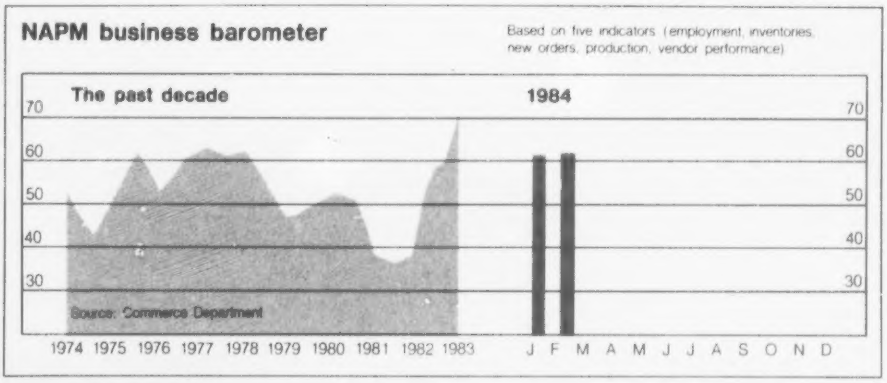
(Index: 1967 = 100)



Zinc

All signs point to continued firmness. Worldwide stocks, for instance, have dropped by more than 40% over the past year. And here in the United States, smelter holdings are now the equivalent of less than a month of shipments. Meantime, on the demand front, projections now call for about a 6% increase in domestic use this year (to 925,000 tons)—on top of last year's even bigger 12% gain. Also adding to demand pressures are expectations that the Chinese will buy another 200,000 tons this year. Conclusion: further modest price boosts—to maybe the 55¢/lb range by late spring or summer.

BUSINESS DATATRAK



NAPM business barometer

Based on five indicators (employment, inventories, new orders, production, vendor performance)

KEY ECONOMIC TRENDS

Strong gains in spending seen

The economy is still moving up at a fairly brisk clip—despite budget deficit worries and an extremely nervous stock market.

Probably the most encouraging sign is the continuing strength in the NAPM Business Barometer (chart above), a yardstick of overall activity some 2-3 months into the future. The latest reading is put at 61.5—virtually unchanged from the previous month and more than 11 points above the neutral 50 level.

Inventories also suggest a healthy economy. Stocks, while they clearly have begun to inch ahead, haven't nearly been able to keep pace with sales. Result: a continuing decline in inventory-sales ratios.

At latest report, for example, the combined stocks of manufacturers, wholesalers, and retailers came to only a bit over a 1.3-month supply. That's pretty close to rockbottom and substantially under the close-to-1.55 reading hit back at the end of 1982. If nothing else, it means that any final demand gains over the next few months will have to be met by new production, thus giving activity a further upward jab.

This doesn't mean, of course, that there aren't pitfalls ahead. But they may be exaggerated as far as their nearterm impact is concerned. Although the media continue to talk up the threat of high interest rates, there has been as yet no major spurt (see top chart alongside).

Meantime, all the demand spigots seem to be wide open. And that also goes for the one sector that until recently has been dragging its feet—plant and equipment spending.

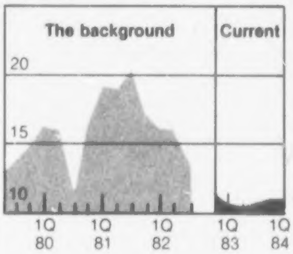
The good news here is seen at two levels: (1) the authorization level, where capital appropriations (as measured by The Conference Board) have recently jumped a resounding 13% (see center chart), and (2) the actual spending level, where a new McGraw-Hill survey points to a big 17% rise in 1984 outlays—up substantially from the 9.4% estimate made just three months earlier.

The bullish housing outlook is further verified by housing permits, a lead indicator of actual starts. Right now, these building authorizations are running at close to a 1.8 million annual rate (see bottom chart)—just about confirming earlier forecasts for a 1.7-1.8 million-unit housing start year.

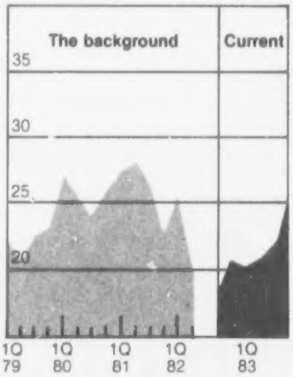
If nothing else, all the good news suggests that GNP gains will continue on the robust side, with first- and second-quarter increases at an annual rate in the quite-respectable 4-5% range. And even if there's some deceleration after that, the average 1984 advance (vis a vis 1983) still looks to be a bit in excess of 5%—not all

Leading indicators

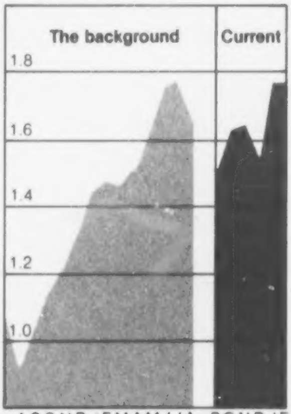
1. Prime rate
(Percent)



2. Capital appropriations
(Billions $)



3. Housing permits
(Millions $, seas. adj.)



that bad for the second year of a recovery.

Check seasonal swings in leads

Don't forget seasonal swings when appraising vendor delivery performances or overall purchased material inventory levels.

Month-to-month variations in these key procurement barometers can be considerable. Take, for example, NAPM's speed-of-delivery yardstick. It can vary as much as 6% depending upon the time of year the goods are ordered (see accompanying chart).

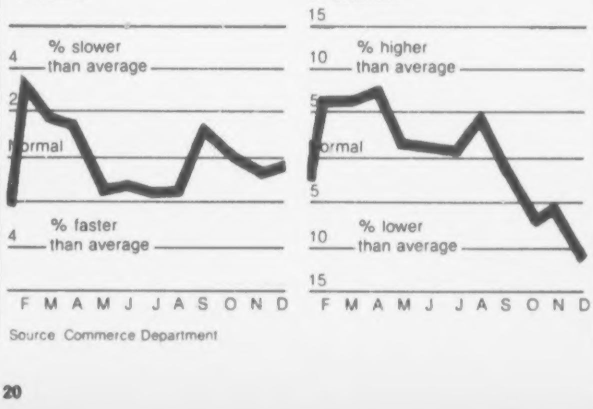
The actual variation, based on a new Commerce Department analysis, suggests that the shortest leadtimes can be expected in January and during the late spring-early summer season. On the other hand, deliveries are likely to be almost 4% slower than average in February.

The seasonal adjustment factors for inventories display a somewhat different pattern, with the low point in holdings (as measured by the NAPM percentages of those adding to and subtracting from stocks) put in December. At that time, inventories are normally 11.5% below average—a figure that makes a lot of sense given (1) normal paring at that time to meet pre-Christmas production schedules and (2) the year-end inventory-tax payments faced by many manufacturing firms.

Contrast the low December inventory reading to that of March when stocks generally run 7.5% above normal. In any event, it's important to keep in mind that inventories over the year can swing a huge 19% and could lead to wrong evaluations for those tending to look only at actual tonnages on the shelves.

By the same token, taking reported delivery performance reports at face value could also lead to possibly wrong conclusions. Thus, if your February deliveries were arriving 6% slower than in January, there would be no need to panic. This would be "normal," or to be expected. The only cause for worry would be if the February slowdown were much more pronounced—say, something in the order of 10%.

Purchasing: The seasonal ups and downs

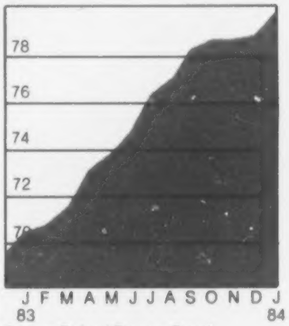


Source Commerce Department

Industrial operating rates

Overall picture

(Percent of rated capacity)



Source: Federal Reserve Board

Industry by industry

(Current rate)

Stone, clay, glass	75%
Steel	68%
Nonferrous metals	80%
Fabricated metal products	72%
Nonelectrical machinery	71%
Electrical machinery	90%
Automotive	83%
Aerospace & transportation	72%
Instruments	76%
Textiles	89%
Paper	97%
Chemicals	73%
Petroleum products	75%
Rubber & plastics products	91%
Mining	76%
Utilities	84%

Pressure growing for new capital spending

There may still be some idle production capacity around, but the elbow room for a further expansion in overall demand may have narrowed considerably.

Over the past year or so, for example, the average factory operating rate has climbed from a low of just under 70% to something near the 80% level at present (see chart). And if you look at some specific sectors, such as paper, producers are already turning out material at well over 95% of their potential. In addition, several other industries are flirting with the 90% mark.

All this is not to say that things are tight, or that they will be getting tight in the quarters immediately ahead. What the new readings do imply, however, is that there will have to be some stepup in plant and equipment spending pretty soon, if there's to be enough capacity to keep the recovery going strong into 1985 and 1986 without encountering serious bottlenecks or accelerating price increases.

Perhaps the best indication that a stepup in capital spending will be needed before too long comes from comparing current projections for industrial production and capacity additions. By the end of the year, for example, industrial output is expected to be up another 4-5% vis a vis current (first-quarter 1984) levels.

Superimpose this forecast on an estimated capacity addition of only around 2% over the same period of time, and the magic 85% cutoff point between ample and no-so-ample capacity may not be all that far away. Also, keep in mind that when the average operating rate approaches 85%, there will be an increasing number of individual industries moving close to or into the 90%-plus range.

CURRENT PRICES

Price increases picking up

Price increases are now beginning to come in at a somewhat faster clip.

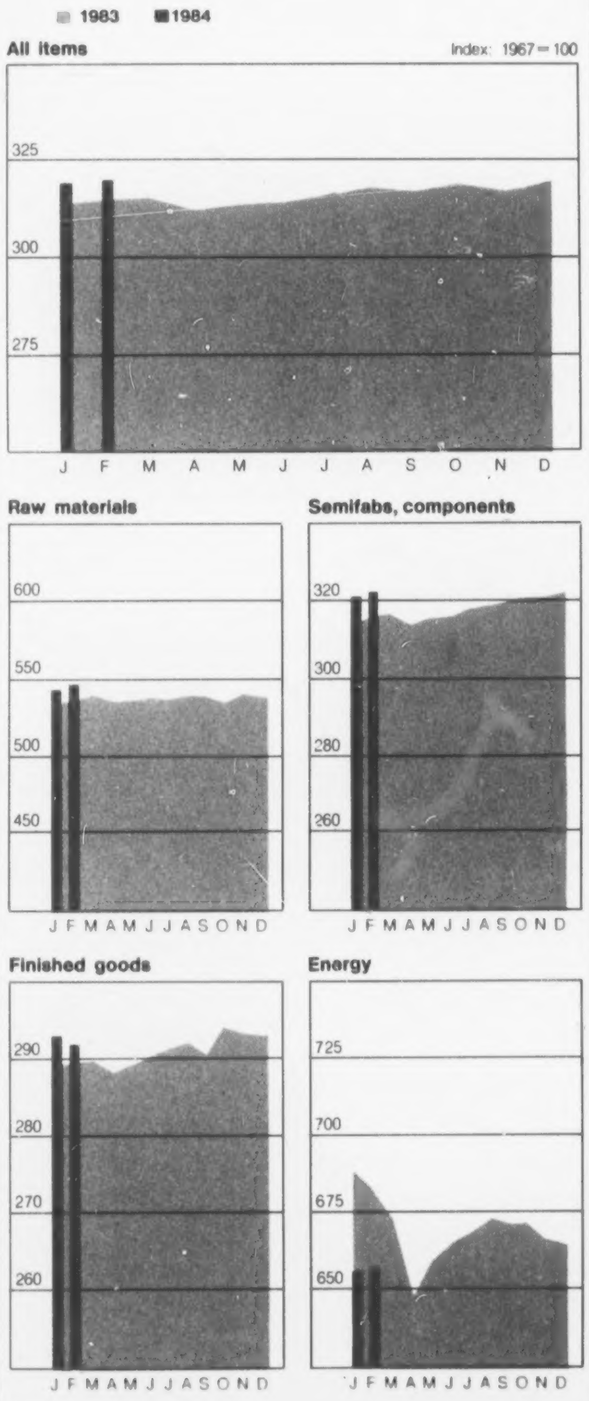
To be sure, there's little to suggest any big, new spiral. But it's hard not to read some significance into the first quarter's 4% annual rate of rise in overall industrial producer prices—the biggest such boost in three years.

Equally noteworthy is the fact that, at latest report, price increases were outnumbering declines by a close-to-3:1 margin—again, something that hasn't happened in several years. And not even these numbers tell the whole story. This list-oriented in-

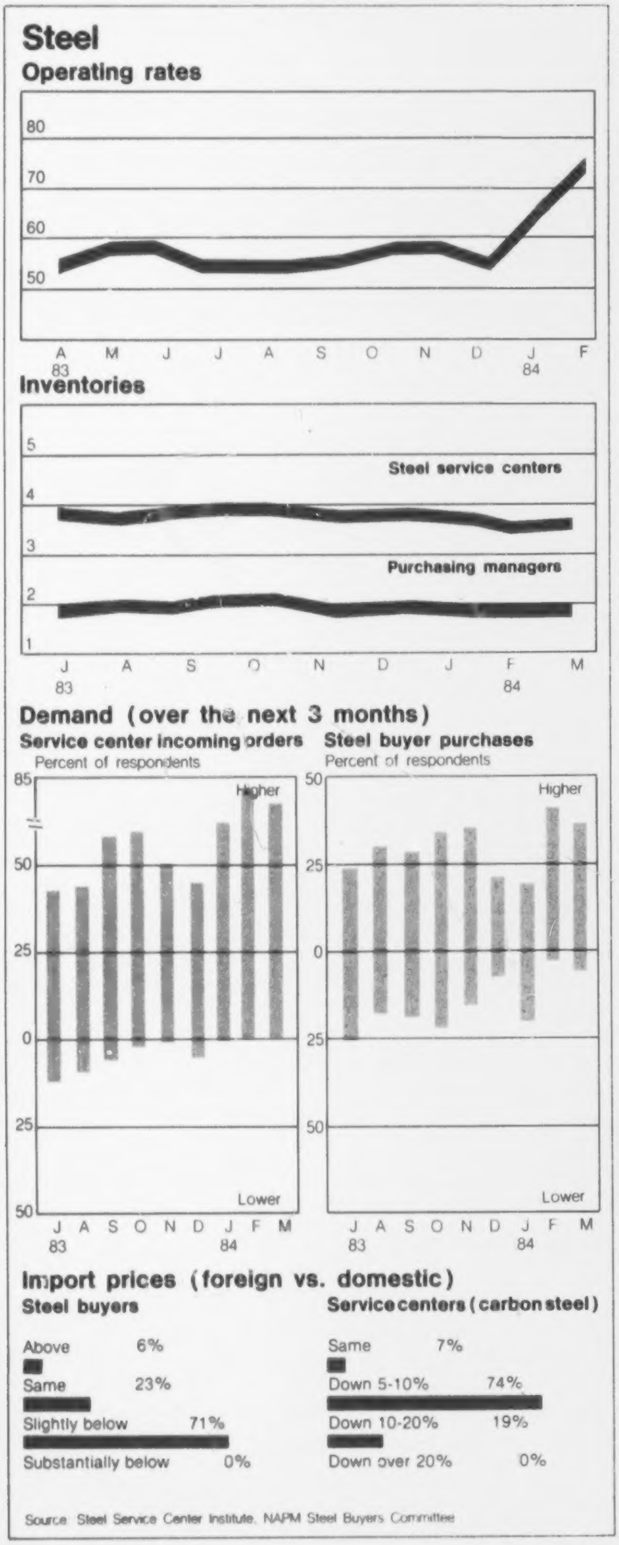
This month's breakdown

	Latest level (Jan)	% change from: Month ago	Year ago
Bearings	335.6	0.7	1.4
Bolts, nuts, etc	271.0	0.0	0.6
Chemicals, inorganic	289.6	−0.3	−3.3
Chemicals, organic	376.1	1.2	5.1
Concrete products	305.6	0.6	2.1
Corrugated cartons	249.3	0.0	3.1
Cutting tools, small	279.9	0.4	1.1
Electrical instruments	274.8	0.0	7.9
Electric lamps (bulbs)	331.4	1.3	11.4
Electronic components	188.2	0.6	5.4
Fans and blowers	337.6	0.5	0.2
Foundry and forge products	354.4	0.4	2.2
Fuel oil (residual)	1164.8	−1.7	10.2
Furniture, commercial	290.8	0.1	3.5
Gasoline	570.3	−2.9	−9.3
Glass, flat	229.5	−0.2	−0.1
Glass containers	351.0	0.0	−1.6
Gypsum products	328.5	2.2	24.9
Hand tools	352.9	0.5	1.6
Hand tools, power driven	222.2	0.6	0.5
Industrial furnaces	370.2	0.3	3.7
Integrating and measuring instruments	225.8	0.1	3.9
Internal combustion engines	344.3	0.5	2.2
Lubricating oil	749.9	0.8	−3.1
Lumber millwork	308.5	0.0	5.0
Material handling equipment	287.0	0.2	0.5
Metal containers	344.5	1.9	5.1
Metal mill shapes (nonferrous)	315.2	−0.1	2.6
Metal tanks	304.9	0.3	−0.8
Motors and generators	337.3	0.4	5.1
Motor trucks (10,000 lb and under)	280.4	0.1	2.5
Office and store equipment	155.8	0.6	1.1
Paperboard	262.2	1.0	7.8
Paper boxes and shipping containers	252.6	0.2	1.7
Paper office supplies	231.5	1.8	2.1
Paint	265.7	0.3	0.4
Plastic resins	304.2	2.0	7.2
Precision measuring tools	245.4	0.4	1.3
Pumps and compressors	346.1	−0.1	1.1
Refractories	355.0	0.2	5.1
Rubber belts and belting	332.2	−0.6	2.8
Scales and balances	228.0	−0.1	0.0
Steel products	268.8	−0.2	1.1
Switchgear	359.5	0.9	5.2
Textiles, synthetic fibers	159.2	0.6	1.6
Textiles, gray fabrics	152.8	0.7	5.8
Tires and tubes	242.9	0.0	−4.8
Transformers and power regulators	223.4	−0.2	1.4
Welding equipment	276.1	1.1	−1.1
Wire and cable	201.8	0.1	0.3

Industrial prices at a glance



Source: Bureau of Labor Statistics



Source: Steel Service Center Institute, NAPM Steel Buyers Committee

dex is probably failing to pick up all of today's narrowing discounts.

Generally speaking, the firming has been most pronounced in crude materials. Averages here, for example, are currently running 2-3% ahead of levels prevailing a year earlier, compared to the 1% increase in finished goods noted over the same 12-month period.

The machinery and equipment category, which has been marking time this past year, should soon begin to move up—especially if new projections calling for a 10%-or-higher increase in 1984 capital goods demand proves to be anywhere near correct.

These trends shouldn't be interpreted to mean that double-digit industrial price hikes are just around the corner. They do mean, however, that the typical buyer will face higher tags on more and more products in the months ahead. And the average rate of increase is likely to accelerate into the 5-6% range at an annual rate by the fourth quarter.

STEEL SCENE

Solid gains expected for steel

First-quarter steel gains were no temporary aberration. So say a growing number of purchasing managers and service centers, with both groups anticipating even better performances over the April-June period.

An impressive 36% of buyers responding to the latest NAPM steel survey, for exanple, expect to increase their purchases of the metal over the next three months. That's some six times the small 6% who feel they may cut back a bit.

Most service centers responding to the latest Steel Service Center Institute (SSCI) survey tell much the same story. Specifically, three out of four see nearterm increases in their companies' sales—with all of the remaining respondents anticipating stable rather than falling order totals.

Individual responses suggest that the uptrend will continue into the second half, too—though there are some reservations about the long run (1985 and beyond).

How much of an overall gain for 1984 then? Most service centers tend to put the increase in the 10% or slightly higher range.

Andrew G. Sharkey, SSCI president, is a shade more conservative. He now figures on an 8.5% increase, which would put overall distributor sales at around the 19-million-ton mark—all on top of last year's hefty 20% advance.

He and others admit, however, that up until now not all products have been faring equally as well. While plate and structurals have lagged a bit, most flat-rolled items (including cold-rolled, galvanized, and other coated sheets) have been moving exceptionally well—so well, in fact, that leads in these latter areas have stretched considerably.

Indeed, there's even some concern about possible tightness. A scattering of service centers see problems in the cold-rolled and coated sheet sectors, with one or two also expressing some concern about stainless.

Perhaps the most eye-opening figure on buyer concern is the fact that only 59% of the respondents now say they are worry-free as far as supplies are concerned. That compares to 73% at the beginning of the current year and the near-100% reading of just one year ago.

But worried or not, few seem inclined to build up inventories. Days' supply is actually continuing to decline (see chart). Moreover, more buyers and service centers still rate their stocks as being "too high" rather than as being "too low."

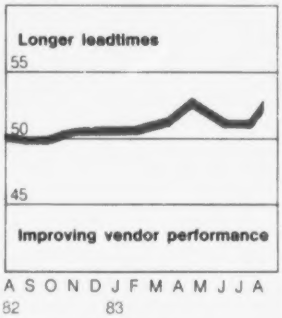
Their nearterm plans reflect this appraisal, too. On the buyer's front, for example, the number planning to pare stocks over the next six months still exceeds those contemplating additions—though the gap has been narrowing. And in the steel service center sphere, those planning on reductions just about balance out those planning on further additions.

Both groups also seem to agree that import bargains are now a bit harder to come by. For the first time in years, for instance, not a single steel buyer finds that foreign mills are offering prices significantly under domestic levels.

Monthly procurement status report

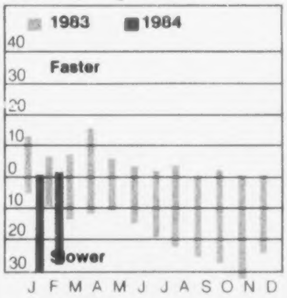
Leadtime index

A 'diffusion' index based on 158 key commodities. Above '50' indicates a tendency for leadtimes to stretch out. Below '50' suggests improving vendor performance.

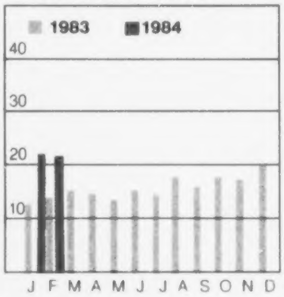


Delivery performance

Percent reporting deliveries

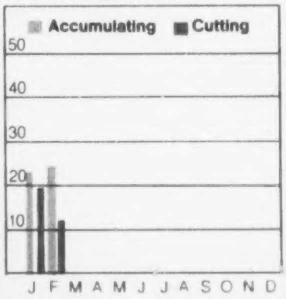


Forward commitments



Inventory strategy

Percent of respondents



Source: NAPM

PROCUREMENT STATUS

Leadtimes continue to lengthen

Leadtimes, while still in the tolerable range for most product lines, continue their slow stretchout.

Blame it on a combination of factors: (1) the fact that many suppliers have not geared up quickly enough to meet expanded demand, (2) the gradual disappearance of excess production capacity, and (3) the lingering effects of recent bad winter weather in many areas of the country.

The latter, in fact, is part and parcel of a normal seasonal slowdown during the first quarter of every year. February and March shipments generally run 2-4% slower than normal.

A look at the close-to-150 individual product lines monitored by *PW* tells much the same story. More than one-third of the items are now sporting leadtimes longer than they were a year ago. And the slowdown encompasses a broad spectrum of industrial product lines, including such key items as steel, paper, plastic resins, and electronic components.

Confirmation of the stretchout also comes from NAPM's speed-of-delivery survey. At last report, for example, some 27% of the respondents were experiencing somewhat slower deliveries, with only 2% noting a speedup. Again, this is a long-running phenomenon, with slowdowns topping speedups for upwards of a year now.

But no one is pushing the panic button. One reason is that the overall new-order pace is expected to slow down a bit this spring and summer. Equally significant, more and more vendors are beginning to raise their capital spending sights—a trend that suggests new capacity may soon be ready to come on stream at a slightly faster clip.

In short, while things may not get better, they're not likely to get much worse.

Leadtimes and availability

Chicago: A whole spate of extensions here, with these new, higher leads noted (in weeks): printed circuit boards (8-26), plastic film laminations (16-20), wrapping paper (3-8), coated/galvanized steel (9-12), heavy steel plates (6), light steel plates (6), aluminum coil and sheet (14-16), brass coil and sheet (12-18).

Cleveland: Cold-finished aluminum is now out to 12-14 weeks. Other typical waiting times: corrugated boxes (3), folding boxes (4), 2-ply fiber drums (2), paint (3-5), polyethylene and PVC (3), and most alloying materials (on demand), glassines and greaseproof papers (4-5), lumber (3), plastic shrink film (3).

Los Angeles: A fair number of stretchouts here, to these new weekly levels: galvanized steel (20), electromechanical devices (8-10), fasteners (6), stainless steel (16), heavy-duty steel (14), aluminum sheet and pipe (17), electric cable (22-26), electronic hardware (6-8), passive components (24-32).

BUSINESS DATATRAK

Houston: Not all that much change this month, with these weekly leads generally prevailing: mill steel (4), service center steel (1), structural steel (13-18), shop-fabricated alloy steel pipe (13-26), small cast-steel valves (0-13), forgings (4-6), MRO supplies (3), electric and electronic components (8), air compressors (4-6).

Philadelphia: Electronic parts continue to move out to these new, longer weekly leads: single-sided PC boards (6-8), custom keyboards (16-20), linear transistor logic ICs (22), multiconductor cable (18-20), electrolytic capacitors (24-36), carbon steel bar rounds from the mill (6-8). Microprocessors are in a bit.

Pittsburgh: Polyethylene and PVC resins remain in the relatively high 5-week range. Ditto maintenance paints. Other prevailing waits: steel strapping (2-3), silicon (4), magnesium (6), zinc (4), plastic bags (3-4), multiwall bags (6), all types of drums (6), lumber (3-4), waterproof paper (8), and laminating paper (6-9).

Leadtimes (in weeks)

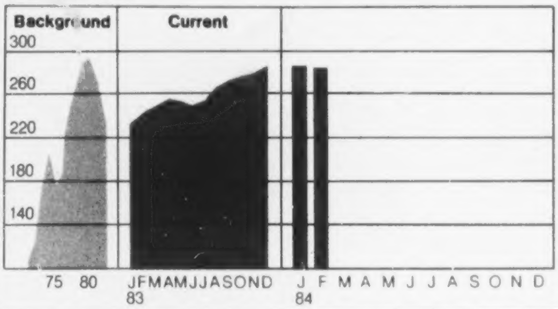
	Now	Month ago	Six months ago
STEEL			
Sheet (Phil)	9	9	7
C-R Sheet (Chgo)	8	8½	10
Plate (Phil)	10	10	4½
Plate (Chgo)	6	4	2½
Reinforced (Hous)	6	6	6
H-R Bars (Phil)	7	4½	4½
H-R Bars (Chgo)	3	3	2½
Cold-Drawn Bars (Phil)	4½	4½	4½
Galvanized (LA)	20	20	5½
Galvanized (Chgo)	9	7	7
Structurals (Chgo)	2½	2½	2½
Structurals (Hous)	17	17	17
Tubing (Phil)	7	7	6
Grey Iron Castings (LA)	6	6	8½
Steel Castings (Hous)	11½	11½	11½
Forgings (Hous)	7	7	7
Pipe, Carbon (Hous)	13	13	13
ELECTRIC & ELECTRONIC			
Cables (Chgo)	8½	8½	8½
Capacitors (Chgo)	16	16	13
Circuit Breakers (Chgo)	6	6	6
Electromech. Devices (LA)	9	9	8
ICs (Linear) (Phil)	20	20	11
Motors (Phil)	21	21	21
Motors, 1000 hp & Up (Hous)	39	39	39
Printed Circuit Boards (Chgo)	17	12	7
Relays (Chgo)	15	15	15
Resistors (Chgo)	10	10	10
Resistors, Wirebound (Phil)	10	9	10
Transformers (Chgo)	10	10	10
LUMBER			
Hardwood (Pgh)	3	3	3
Hardwood (Clev)	3½	3½	3½
Plywood (Chgo)	1½	1½	2
Plywood (Phil)	1½	1½	1½
Softwood (Clev)	3	3	3
Softwood (Phil)	1/5	1/5	1/5
Softwood (Pgh)	3	3	3
Particleboard (Phil)	2½	2½	2½
CHEMICALS-PLASTICS			
Adhesives (LA)	½	½	½
Napthalene (Chgo)	2	2	2
Paint (LA)	4	4	5
Paint, Coil Coating (Pgh)	4	4	4
Paint, Maint. (Cleve)	3	3	2
Polyester Resin (LA)	2	2	2
Polyethylene Resin (Cleve)	3	3	2½
Polyethylene Resin (Pgh)	4	4	4
PVC Resin (Chgo)	2	2½	2½
PVC Resin (Pgh)	4	4	4
Titanium Dioxide (LA)	1	1	1
PACKAGING			
Bags, Kraft (Pgh)	5	5	5
Bags, Multiwall (Clev)	9	9	9
Bags, Multiwall (Pgh)	6	6	6
Cartons, Corrugated (Cleve)	3	3	3
Cartons, Corrugated (Hous)	3	3	3
Cartons, Folding (Phil)	6½	6½	6½
Cartons, Folding (Pgh)	3½	3½	3½
Cellophane Wrap (Phil)	5	5	5
Plastic Bags (Pgh)	3½	3½	3½
Plastic Pkg. (Pgh)	3	3	3
Shrink Film (Chgo)	4	4	4
Shrink Film (Clev)	3	3	3
Drums, Fiber (Pgh)	1	1	1
Drums, Steel, Std. (Pgh)	1	1	1
Wood Pallets (Chgo)	2½	2½	2½
Wirebound Boxes (Pgh)	4½	4½	4½
Strapping (Clev)	2½	2½	2½
Strapping (Pgh)	3	3	3
PAPER			
Fiberboard (Clev)	3½	3½	3½
Glassine (Clev)	4½	4½	4½
Glassine (Pgh)	5½	5½	5½
Groundwood (Clev)	4½	4½	4½
Groundwood (Pgh)	7	7	7
Kraft (Clev)	1	1	1
Kraft, Bleached (Clev)	1	1	1
Kraft, Bleached (Pgh)	5	5	5
Kraft, Natural MFNS (Clev)	1	1	1
Laminated (Clev)	8	8	8
Tissue (Pgh)	5½	5½	5½
NON-FERROUS			
Aluminum Coil (Chgo)	15	11	11
Aluminum Plate (Chgo)	9	9	9
Aluminum Sheet (LA)	4½	4½	4½
Aluminum Sheet (Chgo)	15	14	14
Brass Castings (LA)	7	7	8½
Brass Rods (Chgo)	3½	3½	3½
Brass Sheet (Chgo)	15	13	6½
Brass Tube (Chgo)	9	9	6½
Copper Fittings (LA)	3½	3½	5½
Copper Mill Prod. (Pgh)	6	6	6
Copper Tube (LA)	5½	5½	6½
Copper Tube (Phil)	6	6	6
Lead (Pgh)	2	2	2
Magnesium (Pgh)	6	6	2
Manganese (Clev)	1	1	1
Nickel (Clev)	1	1	1
Nickel (Pgh)	2	2	2
Silicon (Clev)	1	1	1
Tin (Pgh)	3	3	3
Wire, Specialty (LA)	6	6	5
Zinc (Pgh)	6	6	2
MISCELLANEOUS			
Bearings, Domestic (Phil)	2½	2½	12
Bearings, Foreign (Phil)	26	26	26
Boilers & Furnaces (Hous)	35	35	35
Compressors, Centrifugal (Hous)	52	52	52
Compressors, Reciproc. (Hous)	39	39	39
Fasteners (Chgo)	1½	1½	½
Fasteners (LA)	6	6	4
Fasteners, Std. (Phil)	2	2	2
Heat Exchangers, Carbon-alloy Steel (Hous)	20	20	20
Heat Exchangers, Hi-pressure (Hous)	21	21	21
Insulation Mat'l. (LA)	7	7	8½
Machined Parts (Hous)	9	9	9
Pipes & Valves (Chgo)	2	2	1½
Pumps (Hous)	39	39	41
Pumps (LA)	9	9	4½
Rubber, Synthetic (LA)	2	2	2
Rubber Hose (LA)	4	4	4
Tungsten Carbide Parts (Hous)	15	15	15
Valves, Cast Steel (Hous)	6½	6½	8
Welding Supplies (Hous)	5	5	5

BUSINESS DATATRAK

Raw material price barometer

Latest month	283.0
Month before	283.6
Year ago	241.3

Index: 1967 = 100



Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	347.00	347.00	347.00
Steel, structural shapes, Pitts., cwt.	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt.	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt.	24.40	24.40	24.40
Steel, bars, dlvd. Phila., cwt., merchant quality	17.50	17.50	17.50
Steel, bars, Pitts., cwt.	17.50	17.50	17.50
Steel, bars, C.R., Pitts., cwt.	26.00	26.00	26.00
Steel, plates, Pitts., cwt.	23.25	23.25	23.75
Steel, plates, H.R., Pitts., cwt.	23.25	23.25	23.75
Steel, sheets, C.R., Detroit, cwt.	27.10	27.10	26.15
Steel, strip, C.R., Chi., cwt.	35.30	35.30	29.05
Steel, basic wire, Pitts., cwt.	23.65	23.65	23.65
NONFERROUS			
Aluminum, ingot, lb. (market place)	0.715	0.745	0.600
Antimony, in alloy, lb.	2.00	2.00	2.00
Beryllium-copper, cost ingot, lb.	5.20	5.20	4.95
Brass, red, 85%, [sheet], lb.	1.25	1.22	1.27
Brass, yellow, [sheet], lb.	1.20	1.17	1.23
Cadmium, ton lots, lb.	1.50	1.25	1.00
Copper, electrolytic, wire bars, refd., lb.	0.70	0.68	0.82
Copper sheet, over 24 in., lb.	1.34	1.31	1.38
Lead, common, N.Y., lb.	0.24	0.24	0.21
Magnesium, pig ingot, [99.8%], lb.	1.43	1.43	1.34
Mercury, 20 fl. lots, N.Y., fl.	300.00	292.00	345.00
Molybdenum Climax Oxide/bags, lb.	4.65	4.65	4.40
Nickel, electrolytic, producer, lb.	3.20	3.20	3.20
Platinum, producer, oz.	475.00	475.00	475.00
Silver, N.Y., oz.	9.82	8.75	10.31
Tin, Straights, N.Y., lb.	6.45	6.23	6.62
Zinc, Prime West, East St. Louis, lb.	0.51	0.51	0.38
Zinc, die casting alloy, No. 3, lb.	0.575	0.575	0.465
PAPER			
Uncoated book #3 offset, ton	810.00	810.00	710.00
Watermarked bond, ton	985.00	915.00	845.00
Gummed sealing tape, carton	15.45	15.45	15.70
Boxboard, mach. clay ctd. recycled sheets 80 bright, .016, ton	475.00	475.00	475.00
Wrapping paper, std. distributor cost, kraft, basis wt. 50 lb., roll	28.00	28.00	28.00
Kraft linerboard, 42 lb., unbleached, ton	320.00	320.00	250.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd.	0.306	0.301	0.249
Cotton drill, 1.85, 59", 68x49, N.Y., yd.	1.03	1.02	0.95
Cotton middling, 1", N.Y., lb.	0.733	0.697	0.647
Printcloth, 48", 80x90, N.Y., spot. yd.	0.80	0.85	0.60
Army duck, 37", 13 oz., yd.	1.79	1.79	1.60
Blended printcloth, 64", 78x54, yd.	0.725	0.720	0.670
20s combed yarns	2.14	2.14	1.68
Wool tops, N.Y., lb.	3.60	3.60	3.60
CHEMICALS			
Acrylonitrile, tanks, lb.	0.43	0.43	0.43
Ammonia, anhydrous, fertilizer, wholesale, tanks, ton	210.00	195.00	150.00
Benzene, petroleum, tanks, Houston, gal.	1.43	1.40	1.45
Caustic soda, 76% solid, drums, carlots, cwt.	26.00	26.00	26.00
Cresylic acid [ver 25%], tanks, lb.	0.58	0.58	0.66
Formaldehyde, USP, 37% [12% to 15% meth.], tanks, lb.	0.106	0.106	0.106
Glycerine, synthetic, tanks, lb.	0.81	0.81	0.73
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	0.450	0.450	0.715
Naphthalene, crude, tanks, lb.	0.22	0.22	0.22
Phthalic anhydride, tanks, lb.	0.305	0.305	0.255
Polyethylene resin, low density liner film grade (market price), lb.	0.42	0.42	0.29
Polypropylene, homopolymer grade (market price), lb.	0.41	0.41	0.35
Polystyrene, general purpose grade (market price) lb.	0.44	0.42	0.36
Shellac, bone dry, N.Y., lb.	1.65	1.65	1.65
Soda ask, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	0.35	0.35	0.35
Sulphur, crude, ex-terminal, Tampa, Fla., lt.	140.00	132.50	135.00
Sulphuric acid, 66%, commercial, tanks, ton	56.35	56.35	56.35
Titanium dioxide, anatase, reg., carlots lb.	0.69	0.69	0.69
Xylene tanks, gal.	1.35	1.35	1.45
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	316.85	313.75	329.90
Lumber, 2x2, pine, mbf, cl	315.50	314.05	318.40
Plywood, plyform, ¾", msf, cl	582.05	559.55	540.30
Plywood, ⅝", msf, cl	384.10	348.50	350.70
Cement, bulk, ton, tl	62.44	62.35	62.57
Sand, ton, cl	6.13	6.15	5.93
Ready-mix concrete, 3,000 psi/cu.yd., 15 cu. yd.	45.47	45.80	45.64
Crushed stone, 1½", ton, cl	7.87	8.00	7.88
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.76	0.76	0.75
Gypsum sheathing, ½"x1"x8", msf, tl	199.34	198.97	160.36
Brick, common, per thousand, tl	172.78	172.50	172.95
Asphalt paving, AC-20	163.54	161.31	157.91
Concrete sewer pipe, 12", prem. joint, per foot, cl	6.79	6.79	6.78
FUELS			
Fuel oil, No. 6 or Bunker C, Gulf., bbl.	24.75	26.20	23.00
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	32.15	32.90	27.75
Gasoline, 91 oct., reg., Los Angeles, rack, gal.	0.790	0.738	0.735
Gasoline, 94 oct., reg., Chi., tank car, gal.	0.805	0.808	0.810
Heating oil, No. 2, Chi., bulk, gal.	0.789	0.854	0.725
Heating oil, No. 2, N.Y., bulk, gal.	0.838	0.825	0.798
Heavy fuel, PS 400, Los Angeles, rack, bbl.	26.25	26.25	24.50
Jet kerosene, gal.	0.795	0.825	0.770
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	0.44	0.46	0.45
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	100.00	105.00	78.00
Steel, No. 1, hvy., dlvd., Chi., ton	88.00	88.00	78.00
Copper, No. 1, East, wholesale buy, dlvd., lb.	0.625	0.590	0.700
Copper, No. 2, East, wholesale buy,	0.530	0.505	0.595
Brass, red, East, wholesale buy, dlvd., lb.	0.585	0.550	0.660
Brass, yellow, East, wholesale buy, dlvd., lb.	0.383	0.325	0.360
Alum., old sheet/cast, E., wholesale buy, dlvd., lb.	0.495	0.500	0.310
Alum., mixed clip., E., wholesale buy, dlvd., lb.	0.510	0.515	0.330
Zinc, old, East, wholesale buy, dlvd., lb.	0.185	0.185	0.080
Lead, clean solids, East, wholesale buy, dlvd., lb.	0.140	0.140	0.115
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	30.00	30.00	7.00
Paper, old corrug. box, dlr., N.Y., ton	27.00	25.00	6.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb.	0.13	0.13	0.10
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb.	0.34	0.34	N.A.

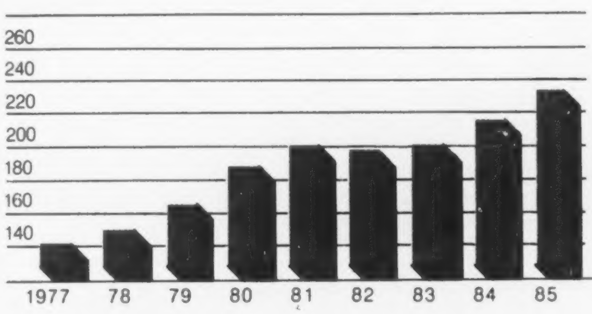
[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]

Transportation cost forecast

Carriers caught in cost-price squeeze

***PurchasingWorld* freight rate index**

Index: 1972 = 100



Increase over previous year	
1977	6.4%
1978	7.9%
1979	9.4%
1980	12.7%
1981	7.6%
1982	1.5%
1983	1.7%
1984	6.5%*
1985	8.1%*

*Estimated

Look for carriers to start hyping rate schedules. But with price infighting still the order of the day, there should be plenty of opportunities to chip away at official tabs—enough in most cases to keep overall freight bills in the tolerable range.

Indeed, the average 1984 increase is now put at only around 6.5%—actually one-half a percentage point under advances projected just three months ago (***PW,*** 12/83, p.54). This new optimistic forecast, the latest in a series of quarterly transportation reviews supplied to ***PurchasingWorld*** by Wharton Econometrics, is attributable to several factors, including:

- Excess capacity (many railcars, truck trailers, and barges still mothballed)
- Stiff competition (both within and among the various modes)
- Very modest fuel price boosts (5-6% projected over the current year)
- Stable wages (unions still being forced to grant concessions).

By 1985, however, some of these downward-tugging forces should disappear. Wage hikes, for example, seem inevitable by then. Ditto, some fuel cost acceleration. Add in better supply-demand balance, and the average 1985 boost could come close to 8.1%, a bit in excess of the anticipated general inflation rate.

Railroads: The industry is making a strong comeback, with good ton-mile gains reported over the past six months. Carriers have been able to take advantage of deregulation to improve their efficiencies and competitiveness through mergers and expansion of intermodal rates. As a result, they have captured a great majority of the increased traffic resulting from the economic recovery. Piggyback traffic has reached new alltime highs.

Rate hikes for railroads will be somewhat under anticipated overall freight averages (only about a 5.6% increase is seen for the current year). Next year's projected advance will also be somehwat under the all-freight average as rail tabs rise only about 7.5%.

Trucking: The industry continues to face major problems despite recent increases in traffic and earnings. For example, the truckers' share of intercity freight is falling, and tax burdens have increased because of (1) higher taxes on fuels and tires and (2) new "road use" taxes and licensing requirements.

Truckers will be able to boost rates an average of only 7.4% this year—about one-half a percentage point under estimates made three months ago. LTL rate hikes will be hard to come by following the 8% gains of 1982 and 1983 as more and more small and medium-sized carriers expand into longhaul LTL.

Barge: The status of this industry can be summed up in one word—*overcapacity*—despite some 1983 traffic gains. And adding to the industry's woes is Washington's push for legislation that would require the industry to pay 70% of the costs incurred by the Army Corps of Engineers for work on inland waterways.

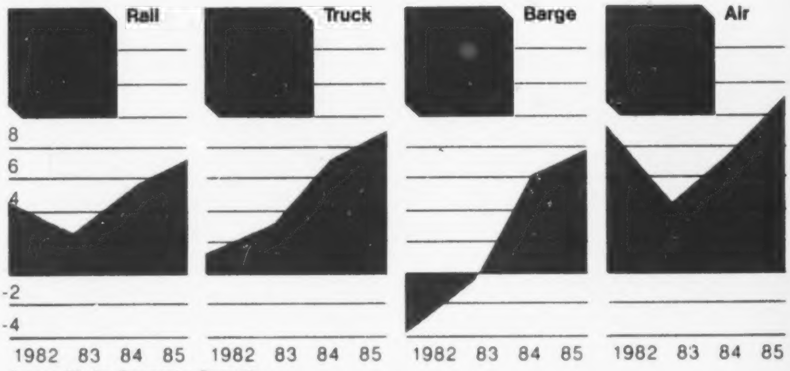
These cost pressures should force about a 6.2% increase in barge tags this year, regardless of continuing competition. And the uptrend is expected to continue into 1985, when increases could average near 8%.

Air: This industry is again flying high. Domestic shipments jumped 25% last year, and another good (though smaller) advance is seen for 1984. Upshot: The average air freight tab could be up 7.7% this year.

But again, intense competition for smaller overnight shipments will limit it almost all price increases to bulk shipments. Adding to this downward pressure is the fact that a number of foreign-based couriers are moving aggressively into the U.S. market. ***PW***

Freight cost outlook by mode (Increase over previous year)

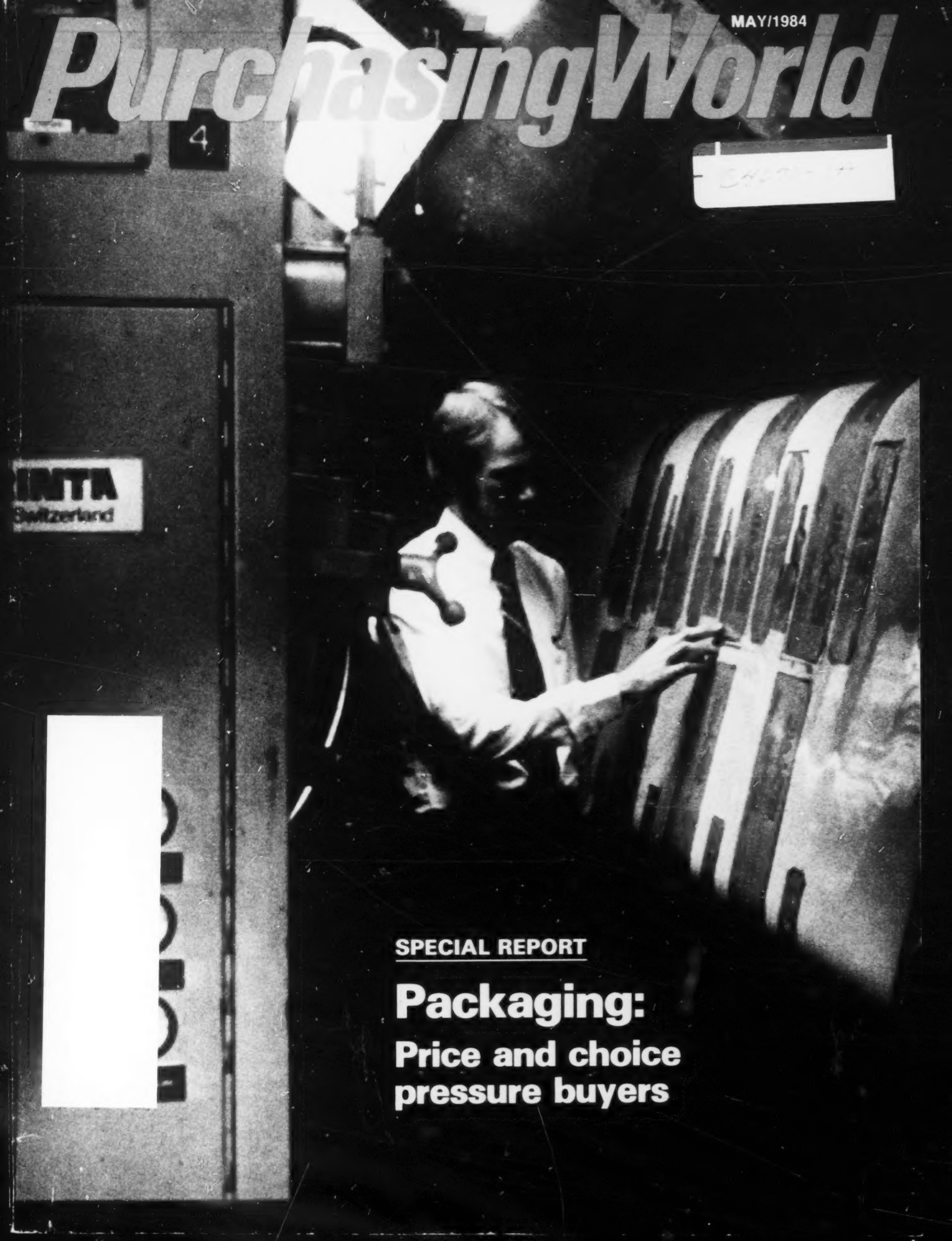
Percent increase



Source: Wharton Econometric Forecasts

MAY/1984

PurchasingWorld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INTA
Switzerland

SPECIAL REPORT

Packaging:

Price and choice pressure buyers

Vol. 28, No. 5-May 1984

PurchasingWorld

Helping you manage the business of buying

Features

47 Packaging markets: purchasing feels the pressure
With price increases hitting all major packaging materials—paper, metals, glass, and plastics—and some stretchouts in delivery times occurring, the nation's packaging buyers will have their work cut out for them. That's the consensus of ***PW's*** most recent survey of not only buyers but also vendors and packaging consultants.

56 Packaging innovations offer more options to buyers
Lighter, stronger packaging materials and greater emphasis on graphics are making packaging materials more of a custom buy for users.

64 NAPM's new look-ahead president
Ed Todd, president-elect of the National Association of Purchasing Management, believes that you get out of an organization what you put into it. Not only has he put a lot into NAPM, but he sees a great opportunity for it in the "whole new breed of young buyers" coming into the field.

66 No surge seen for industrial prices
The pace of price increases will quicken a bit, but don't look for any big new inflationary surge, says Wharton Econometric Forecasting Associates.

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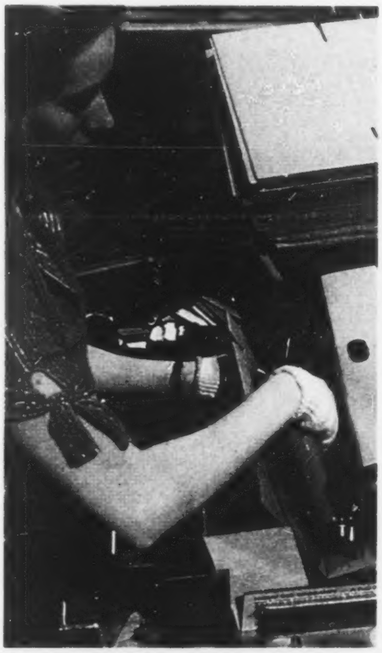
Cover photo: courtesy of Container Corporation of America



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__PurchasingWorld__ (USPS 472 470) is published monthly by Huebner Publications, Inc., 6521 Davis Industrial Parkway, Solon, OH 44139. Printed in USA. Subscriptions: Available without charge to qualified purchasing executives in US manufacturing companies. Available to others in the US for $46/year. Canada $56/year. Foreign subscriptions are available for £70 airmail or £40 surface mail. Sole agent for all subscriptions outside the U.S.A. and Canada is J.B. Tratsart, Ltd., 154a Greenford Road, Harrow, Middlesex HA 1QT, England. Second class postage paid at Cleveland, OH, and additional mailing offices. Circulation and business offices: 6521 Davis Industrial Parkway, Solon, OH 44139. Editorial offices: 800 S. Northwest Highway, Barrington, IL 60010. ** Copyright 1984 by Huebner Publications, Inc., subsidiary of International Thomson Business Press—All rights reserved.* *ISSN 0093 1659*

Postmaster: Send address changes to __PurchasingWorld__ 6521 Davis Industrial Parkway, Solon, OH 44139

PW PREDICTS

Robert S. Reichard, executive editor

Fears of inflation increase

Inflation is again becoming an area of major concern. These fears are being fueled by the modest price acceleration of the past six months—at a 5% annual rate compared with 3½% during the previous six months. Confirmation comes from the fact that 50% of the purchasing executives responding to the latest NAPM business survey say they're being socked with new increases compared with only a reading of 14% just one year earlier.

Even more important, most forecasters believe the acceleration will continue. What they disagree on, however, is just how much acceleration to expect.

As might be expected, there are some purveyors of gloom and doom who insist on projecting a return to double-digit inflation. They cite: (1) the gradual rise in operating rates which could be approaching the 85% level by yearend (a point at which bottlenecks begin to appear); (2) the large growth in money supply (over the past two years it has averaged 9.5% annually—the highest 2-year period since World War II); and (3) increasing demands from labor, including attempts to recoup many of their earlier givebacks.

To be sure, all of these pressures do exist. But it's doubtful whether they signify a new runaway spiral. Indeed, there are even more impressive arguments suggesting only relatively modest price acceleration in the quarters immediately ahead.

It's hard to refute, for example, that the underlying rate of inflation (as measured by unit labor costs) has been virtually halved from the levels of a few years back. In any case, even with some acceleration (say, 2 percentage points), unit labor costs are likely to rise only about 5-6% this year.

Moreover, there are a lot of other potent price-restraining factors around: (1) rising interest rates; (2) the relatively moderate rise in volatile raw material prices; (3) expectations of basically stable oil prices for the next year or so; (4) a continuing strong dollar; (5) projections for a rather good crop year both here and abroad. Then, too, precious metal prices—a time-honored harbinger of inflation—are still depressed.

A recent survey of some 27 leading business economists supports this conclusion. On the average, they predict about a 4.9% increase in the GNP price level for the 12-month period ending fourth-quarter 1984—no analyst puts the advance above 6.5%.

Econometric models tell much the same story. A compilation of 13 of these mathematically derived forecasts projects the fourth-quarter 1983 to fourth quarter 1984 gain at 5%—with the biggest 12-month advance put at only 6.1%.

The halcyon days of 1983—when prices were stable or even falling—are over. But we should be able to get through the current year without too much damage. As for 1985, it's still too early to tell. But if output gains slow down as projected, next year, too, may not be all that bad as far as the overall price level is concerned.

Energy cost trends

Energy tags may be ready to move up a bit. But by and large, the increases will be in the tolerable range. In the oil sphere, they're likely to remain in the 3%-or-lower annual rate through mid-1985 (see chart).

At least, that's how Department of Energy analysts see it. Judging by their regular quarterly look at overall quotes, the only real problem they anticipate is in natural gas—and even then it's an "iffy" situation.

More to the point: On January 1, 1985, over 50% of the gas that is currently being produced will be exempt from federal price controls. This could conceivably make for as much as a 12% increase over the next 12 months. On the other hand, an equally convincing case can be made for excess supplies negating the impact of deregulation. The forecast shown in the chart, calling for a 6% increase, splits this difference of opinion.

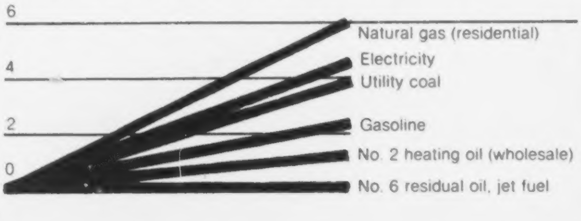
Estimates of electricity rate hikes, meantime, have been lowered from previous forecasts—with an average boost of only 4½% seen over the next year. Behind this optimism: Only modest increases are anticipated for fossil fuels—plus the fact that average capital costs are expected to be lower in 1984 than in 1983.

The fossil fuel assumption is backed up by forecasts for near-stable crude oil tags over the forecast period and a relatively modest 4% increase in coal.

That's not to say, of course, that there won't be some seasonal fluctuations. Heating oil can expect declines of 2-3% this summer. But they'll probably be offset by increases of equal magnitude by late fall or winter.

Energy tags into mid '85

Percent change from 2nd qtr 1984 to 2nd qtr 1985

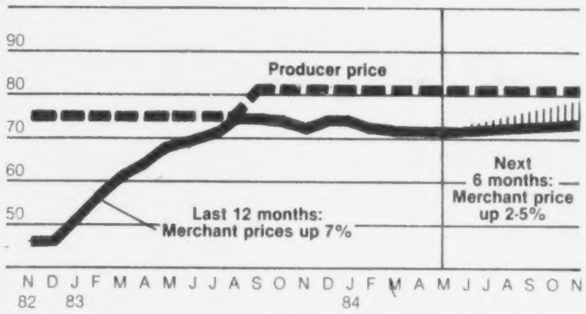


Source: Department of Energy

PW PREDICTS

Aluminum ingot prices

Cents per pound



CURRENT SITUATION: The industry, buoyed by 1983's big demand and price gains, is talking in terms of another banner year. But price hikes could be somewhat more moderate. True, some fabricated items have just been bumped. But basic ingot seems to be taking a breather. While producer ingot lists continue at 81¢/lb, merchant quotes are down in the low 70s. Demand—as measured by shipments and new orders—continues at a brisk pace, though **leadtimes seem to be leveling off.**

DEMAND: Producers are quite bullish about 1984, estimating as much as a 9% shipment increase (to near 15 billion lb). Aluminum distributors are even more optimistic, expecting as much as a 15% advance in their area. Free World demand should follow suit, with about an 8% overall increase anticipated. In any event, **good gains are anticipated in the packaging, electrical, construction, and transportation sectors.**

SUPPLY: There should be enough to go around. Domestic producers have upped production to near 86% of capacity—and rates could easily by pushed further. Also suggesting optimism are (1) the expectation of increased imports (possibly to 16% of the domestic market by 1990 versus only 10% last year), (2) increasing availability of recycled metal, and (3) the announcement of new plants both in Canada and overseas. **The Canadian expansion alone is expected to push potential up some one million tons by the end of the decade.**

PRICE OUTLOOK: It should take some time for market ingot to move up to official list levels, suggesting that any new boost in the latter may not be in the offing until late in the year. Even then, increases are likely to be modest, with little more than an 85¢/lb price anticipated by this time next year. But fabricated product tags could advance at a slightly faster pace—**on the order of 6-8% at annual rate over the next few quarters.**

Steel

Scattered tightness and rising prices have replaced the glut days of less than a year ago. Items on the hard-to-get list now include cold-rolled sheet as well as coated sheet. In any event, sheet mills are operating at between 90 and 100% of capacity. Added to recovery in other areas, the situation suggests that overall 1984 steel shipments will hit 77-78 million tons—some 15% ahead of last year. Prices, meantime, continue to firm with sheet, stainless plate, tube, and structural rods all moving up in recent weeks. All told, transaction prices are already up 10% from 1983 lows—and heading still higher.

Ethylene

Second-quarter price increases are falling short of the 1.5-2¢/lb increases that producers had been shooting for. Strong competitive pressures, say buyers, have whittled the boost down to only 0.5-1¢/lb. That brings the going transaction price to only 20-20.5¢/lb—some 2.5¢/lb under official list levels.

Copper

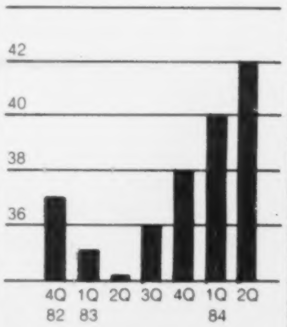
The red metal is beginning to stir. True, the price recovery is hardly spectacular—especially in view of the fact that copper was fetching 84¢/lb as recently as last May. Nevertheless, it does represent a major firming from the 64¢/lb low of a few months back. One key factor behind the firming: falling LME inventories. And here in the U.S., demand is good from both the brass mill and telecommunications sectors. In any event, the underlying trend should be up, with quotes moving up near the 85¢/lb mark by late summer or fall.

Polypropylene

Off-schedule prices are being boosted another 2¢/lb—bringing the going quote to around 42¢/lb for the general-purpose grade. But that would still be some 3¢/lb under the official list level. The immediate force behind the rise: a 2¢/lb increase in propylene, the key raw material. But good demand is another factor. The industry is said to be operating at near 90% of its potential, and very little new capacity is expected to come on stream this year. It's a situation that suggests full return to list levels sometime this summer.

Polypropylene

Market price ¢/lb

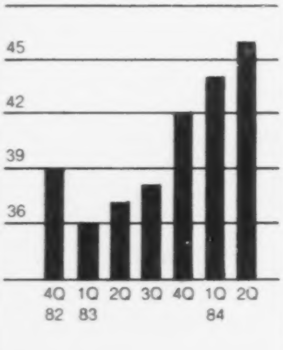


Polystyrene

A new 2¢/lb boost brings quotes back to within shouting distance of official list levels (48¢/lb for the general purpose grade and 52¢/lb for the high-impact, high-heat material). Blame the hike more on rising benzene and styrene feedstock costs than on any supply-demand imbalance. On the latter score, operating rates are still only in the mid-70s range, with an expected 5-6% increase in demand this year not expected to tax production facilities.

Polystyrene

Market price ¢/lb



Computers

There are still plenty of buys on the low end of the market. The Atari 600 XL, for example, goes for only $200—less than half last year's quote. And the Commodore 64 can be had for as little as $159, with the firm's new Commodore 16 targeted to sell for only $100. Also look for price cuts on portable computers as producers move to counter IBM's recent entry. One competing firm has already announced price cuts of up to 17%. IBM also faces increasing competition on its desktop PC as a host of other producers jump into the market offering machines at lower prices or with enhanced computing power.

Lead

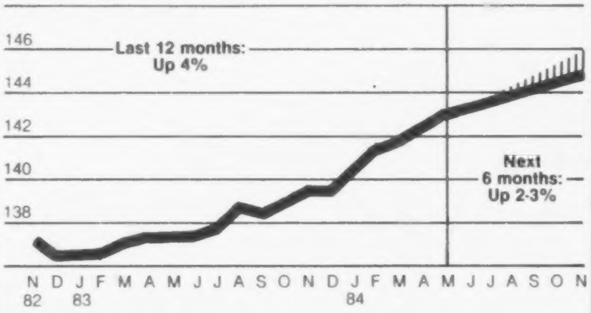
Things are beginning to look up for the heavy metal with a good chance tags could edge up another cent or so in the months immediately ahead. Upward-tugging forces would have to include (1) the recent rise in LME quotes, (2) a decline in warehouse stocks, (3) some tightness in U.S. concentrate supplies, (4) the possibility of labor troubles, and (5) increasing U.S. consumption (a 3-4% increase is projected for 1984). But despite some current snugness, no real supply problems are seen, as secondary facilities continue to operate at only around 60% of their potential.

ABS plastics

Brace for another 5¢/lb increase in lists on top of the 3¢/lb January advance. That will be enough to bring the pipe-grade resin up to 78¢/lb. Behind the boost: strong demand gains which are expected to push consumption totals up some 7-10% this year, plus recently announced boosts in acrylonitrile and butadiene—key ABS ingredients.

Textile mill product prices

Index: December 1975 = 100



CURRENT SITUATION: Bullishness is now the order of the day as orders continue to move higher. Sign of the times: Mill production at latest report was running close to 15% above early 1983 levels. **Prices, however, show surprisingly moderate advances—perhaps because of this import competition.** In any event, average quotes currently run only about 4% above a year ago. The fiber component of prices has moved up faster—**5-6% in the case of synthetics and near 15% for raw cotton.**

DEMAND: Another 5-7% gain seems likely for 1984 as a whole—given both rising consumer incomes and a strong construction market. The latter factor is quite important—tending to beef up demand not only for carpets, but also for draperies, upholstery fabrics, and bed and bath supplies. **Knitting mills, too, should be star performers.** Gains will also impact on fibers, with **some manmade fiber producers now talking in terms of an 8-10% advance this year.**

SUPPLY: Operating rates have been climbing and are now near the 90% mark. But for the most part, it's still a no-sweat situation as imports continue to come in at a recordbreaking clip. In one recent month, for example, combined incoming textile and apparel shipments ran 50% ahead of a year ago on a square yardage equivalent basis. **Also reassuring is the fact that mills have been upping their capital spending sights.** Right now, they expect to spend $1.8 billion—up a strong 28% from 1983.

PRICE OUTLOOK: Performances could vary significantly by type of material. But overall, it would be wise to budget for at least a 2-3% increase by fall—with the 1984 textile average running some 5-6% ahead of last year. Carpet averages, however, could be up in excess of 6%. **As for 1985, count on pretty much the same pattern,** though there could be some deceleration in the rate of carpet boosts, down to the 4-5% range.

PW PREDICTS

Express and courier delivery services

Express delivery services are taking off, with outlays over the past six years more than doubling the $4.3 billion back in 1977 to a hefty $10.5 billion last year.

Zero in on the overnight delivery segment of this market, and the advances border on the fantastic. Figures over the same six-year period, for example, suggest more than an eightfold increase here—the equivalent of nearly a 40% annual growth rate.

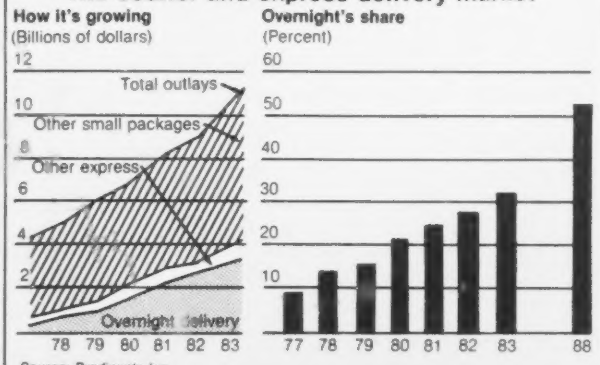
The new findings, part of a new Predicasts, Inc. study, mean that overnight deliveries now account for over 30% of the entire courier and express delivery market. That compares to only a 9% share back in 1977. Nor is that the end of the line. By 1988, for example, the Cleveland-based market research firm sees overnight services capturing close to 43% of the market.

Predicasts' analysts credit the gain to several factors—namely, the trend toward a more information-based, service-oriented economy combined with courier service innovations, aggressive marketing, clever advertising, and geographical expansion.

Another segment of the express delivery market should continue to do quite well, too. Second day delivery gains are targeted to grow at near a 25% annual rate through 1988. But a third category (other small packages—primarily United Parcel's regular service and the Postal Service's fourth class mail) is expected to grow at only a modest 4.3% annual rate over the next few years.

Equally significant, there could be a new growth area on the horizon: express truck delivery. As business turns from static warehousing to just-in-time delivery systems, tempting opportunities will arise for express deliveries via surface transportation. Established trucking firms (especially the less-than-truckload carriers) are likely candidates for entry—as are railroads seeking to broaden their service offerings.

The courier and express delivery market


How it's growing
(Billions of dollars)

Overnight's share
(Percent)

Source: Predicasts Inc.

Electronic components

Count on another few months of high prices for 64K EPROMs ($8/unit in quantities of 1000). But by the fourth quarter, increasing capacity could bring quotes down by as much as 10%. The increasing supply is already having some impact on delivery times. Thus waits of 30 weeks and more last year have dropped to 20 weeks currently—and should drop even further by fall.

Paper

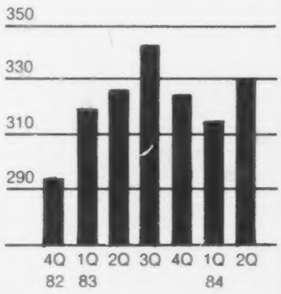
Prices remain in a strong uptrend. Newsprint (up 7%) has been added to the list of products heading higher. And the overall industry is operating at near 95% of capacity this year—versus only 89% in 1983. Other items sporting higher tags since January include coated magazine paper (up 6.5%, or $50/ton), uncoated groundwood (up 7.7%, or $70/ton), and unbleached kraft linerboard (up 10% to $320/ton). Market pulp is up even more—over 21% in the case of bleach softwood and over 17% for bleach hardwood.

Lumber

Brace for some fairly stiff price increases over the next few months, following the fractional decline during the first quarter. Indeed, given the recent strong pace of new housing starts and relatively low mill inventories, rising quotes seem all but inevitable. Averages should be up by as much as 10% by summer or early fall.

Softwood lumber 2x4's

20 city average $/mbf



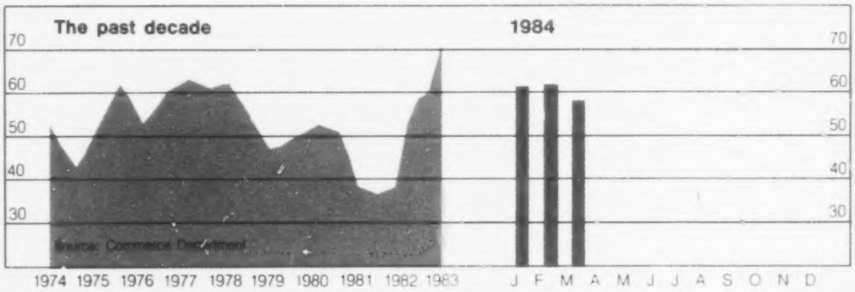
Silver

Operating forces suggest little more than backing and filling around current levels. On the upside are increasing fears of accelerating inflation, the explosive Iraq-Iran conflict, and the shaky Third World debt structure. But these are being balanced by rising interest rates and oversupply. Silver supplied to the market from new mine output and secondary sources tops demand by about 100 million ounces per year. In any case, the $13-15/oz price confidently predicted a few months ago is still nowhere in sight—certainly not as far as the current year is concerned.

BUSINESS DATATRAK

NAPM business barometer

Based on five indicators (employment, inventories, new orders, production, vendor performance)



KEY ECONOMIC TRENDS

Business gains show signs of slowing

The business curve is still heading up, but gains for the most part will be somewhat less robust than those racked up over recent quarters.

Credit much of the expected moderation to the slow rise in the prime and other interest rates. On the other hand, even without this, there are now increasing signs that the big 7%-plus annual rate of growth recorded during the first three months of the year won't be repeated.

New orders, while still rising, aren't showing some of the king-sized advances of earlier months. Then there are the broad-gauge economic indicators such as the NAPM business barometer. True, this bellwether yardstick remains well above the neutral 50 level and hence is signaling continuing gains, but the trend seems to be down.

The picture is much the same if you zero in on individual sectors. Machine tool orders, for example, are high—but still do not show signs of really taking off (see chart above). As one tool maker puts it, "Sure, we're getting a lot more requests for quotes. But as yet, not too many are being translated into solid orders."

Consumer trends also suggest a temporary plateauing at high levels rather than continued acceleration. Auto sales, for example, have remained relatively unchanged in the high, 10-11 million annual-rate range since the beginning of the year (center chart).

Nor is this likely to change over the next few months. Indeed, a new Conference Board study finds that plans to buy new cars have actually dropped a bit—8.4% of the respondents currently versus the 8.8% of a month earlier. Interest in major appliances has also cooled somewhat.

In short, there are precious few signs of the economy overheating. In the words of Fed Vice Chairman Martin, "I don't think we have an overheated economy. I think we have some overheated economists."

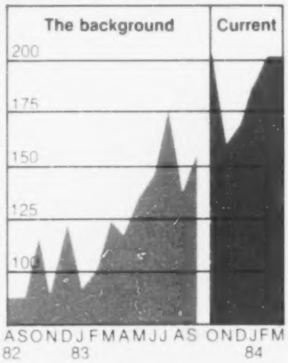
But by the same token, he, and virtually every other analyst, agrees that the trend will still be up. Help-wanted ads continue to rise (bottom chart) suggesting that new jobs are still opening up.

And while order gains are harder to come by, they continue to exceed sales. That makes for a further rise in unfilled orders, thereby assuring continued production gains for the next few months—and probably much longer than that.

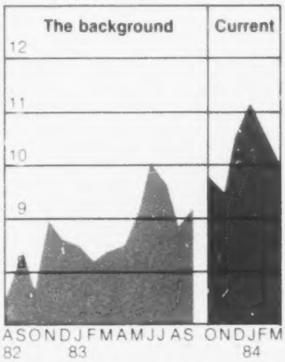
Other factors in the business-sustaining forces include (1) relatively high consumer and business confidence levels, (2) increasing use of lower-cost variable rate mortgages which will help blunt the

Leading indicators

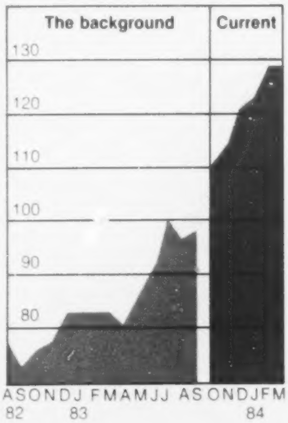
1. Machine tool orders
(millions $)



2. Auto sales
(millions $, seas. adj.)



3. Help wanted
(Index: 1967 = 100)



impact of higher interest charges, (3) continuing modest inventory rebuilding in many industries, (4) still relatively modest inflation, and (5) accelerating government spending.

Conclusion: Business gains may be slowing down, but the 1983-84 upturn still has a way to go. Best bet: about a 4% annual rate of GNP advance over the April-June period—with only a slightly lower 3% rate over both the third and fourth quarters of the year.

Fleet-car trade rates studied

The average U.S. commercial fleet car is sold after about 30 months and just over 56,000 miles, according to a new survey conducted by the National Association of Fleet Administrators. The most popular cycle for manufacturing firms is 36 months and between 55,000 and 65,000 miles.

The picture for noncommercial fleets is somewhat different, however. U.S. government and public utilities fleets, for instance, tend to drive cars 80,000 miles or more before getting rid of them. These vehicles, as might be expected, are also kept longer—71 months in the case of public utilities and 52 months in government use. Canadian vehicles on the other hand, tend to follow the U.S. commercial fleet pattern.

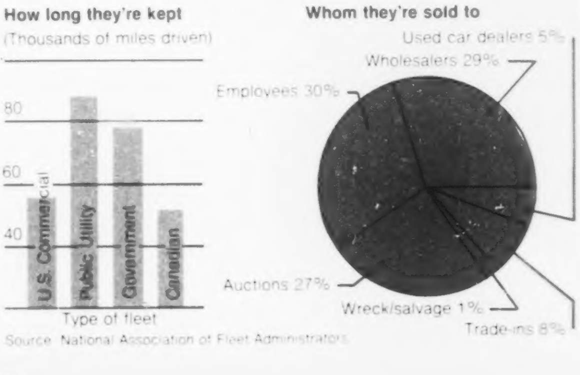
Also of interest to fleet administrators is the fact that the recent trend toward holding cars longer or driving them more intensively before turning them in may be running out of steam.

Of the 26 U.S. commercial fleets planning to change their cycle this year, some 14 say they will lengthen it (either in months or miles driven); while 12 contemplate shortening the cycle. In short, pretty much of a dead heat.

The survey also turned up a variety of disposal methods. The three most popular, in descending order of importance, were sales to employees (30% of vehicles), wholesalers (29%), and auto auctions (27%). Far down the list were trade-ins (8%), used-car dealers (5%), and wreck/salvage (1%).

Similarly, there seems to be a wide range of methods to determine disposal price. The most popular pricing source is the Automotive Market Report (AMR) guidebook. Other approaches include the National Auto Dealers Association guidebook, market value, wholesale value, depreciated book value, Red Book, Black Book, and bids from employees.

Fleet car disposal strategies



Source: National Association of Fleet Administrators

Bill paying picks up

Buyers have been paying their bills a bit more promptly.

At least that's the implication of TRW's latest quarterly rundown of past-due accounts. According to the firm's Information Services Division, only 23.2% of today's procurement bills are delinquent. That's significantly under the 27.6% peak hit back in recession-ridden 1982 and the best ontime performance in nearly four years.

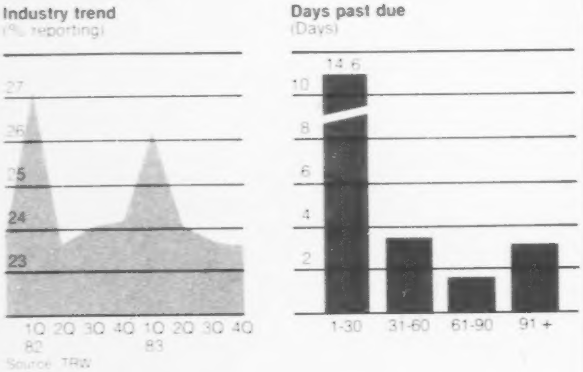
Equally impressive is the fact that really long overdue accounts have shown the most improvement. Bills more than 90 days in arrears, for example, have dropped from 4.4% of total billings in early 1983 to only 3.1% at latest report. The same is true of the 61-90 day overdue category, where a decline from 2.4% to 1.7% is noted over the same period.

Behind the improvement are the strengthening cash position of many firms and the drop in interest rates over the past year—something which reduces the incentive to delay payment.

On the latter score, TRW analysts note an excellent correlation between the prime rate and delinquencies, with the percentage of overdue bills rising and falling with the prime interest rate.

So what's the future trend? TRW isn't quite certain. To be sure, cash positions are still showing substantial improvement. But the interest rate factor is a lot more "iffy" as lending charges bottom out. If nothing else, the latter would seem to imply that further improvement

Past due bills



Source: TRW

in the TRW past-due index may be considerably harder to come by.

CURRENT PRICES

Another month of moderate increases

Chalk up another month of moderately accelerating commodity industry-price increases.

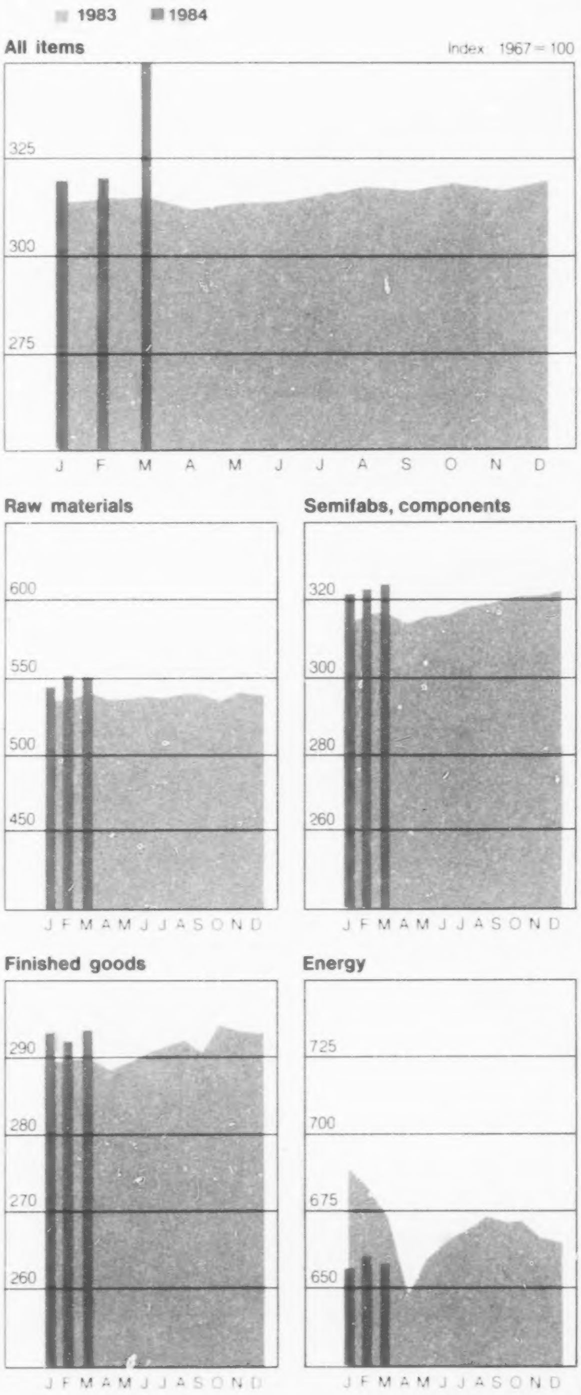
That's not to say that things are getting out of hand—far from it. Uncle Sam's all-inclusive price yardstick (see chart) is currently rising at only a 5-6% annual rate. On the other hand, the current rate does mark a significant change from the relatively flat pattern that prevailed through most of last year.

Leading the pack this

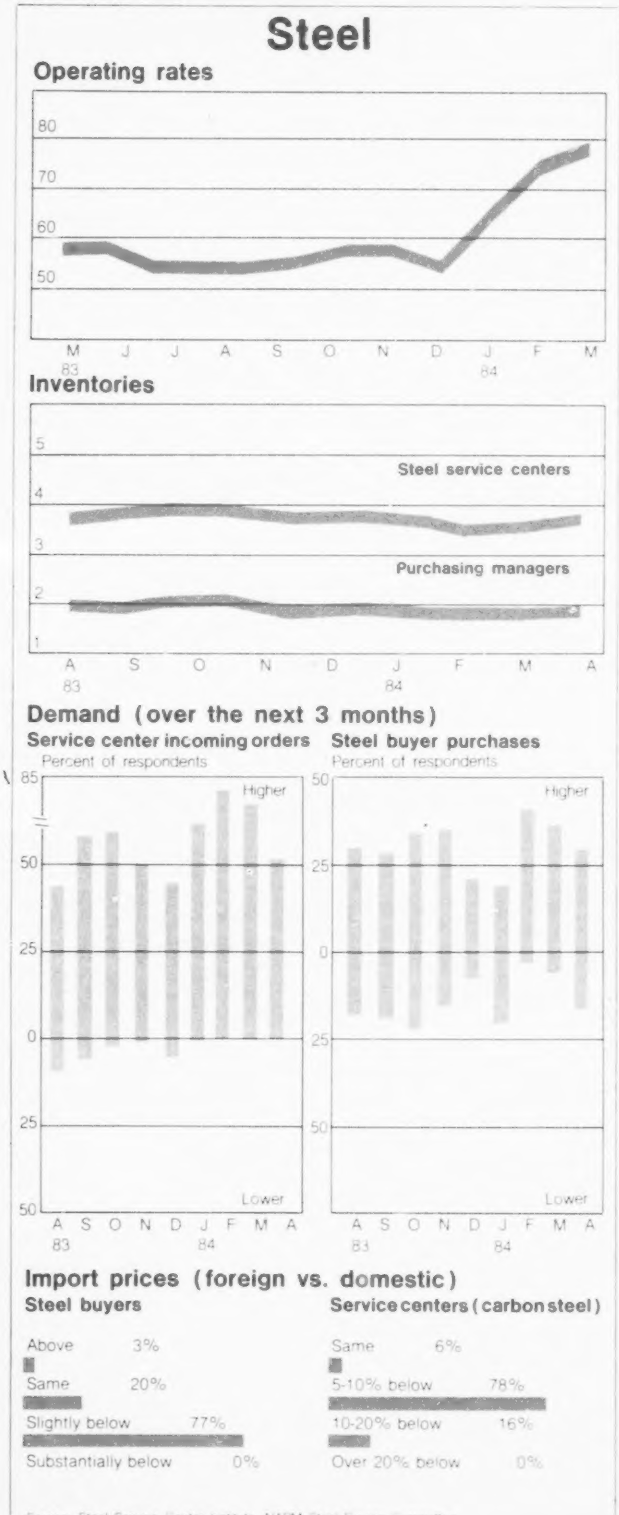
This month's breakdown

	Latest level (Feb)	% change from: Month ago	% change from: Year ago
Bearings	335.5	0.0	1.3
Bolts, nuts, etc	272.0	0.4	1.2
Chemicals, inorganic	288.4	−0.4	−4.0
Chemicals, organic	361.8	−3.8	0.8
Concrete products	306.4	0.3	2.1
Corrugated cartons	251.7	1.0	4.4
Cutting tools, small	279.4	−0.2	0.8
Electric lamps (bulbs)	332.3	−1.5	8.8
Electronic components	190.1	0.7	6.1
Fans and blowers	341.2	1.1	1.2
Foundry and forge products	357.1	0.8	2.9
Fuel oil (residual)	1092.4	−6.2	5.6
Furniture, commercial	293.9	1.1	4.1
Gasoline	563.9	−1.1	−6.4
Glass, flat	230.0	0.2	0.1
Glass containers	350.9	0.0	−1.4
Gypsum products	339.4	3.3	26.9
Hand tools	353.9	0.3	1.6
Hand tools, power driven	223.5	0.6	0.9
Industrial furnaces	370.6	0.1	3.8
Integrating and measuring instruments	228.8	1.3	4.4
Internal combustion engines	344.3	0.0	2.2
Lubricating oil	797.9	0.4	−2.5
Lumber millwork	308.5	0.0	2.7
Material handling equipment	287.2	0.1	0.8
Metal containers	344.9	0.1	4.2
Metal mill shapes (nonferrous)	318.1	0.9	1.7
Metal tanks	304.6	−0.1	−1.1
Metalworking machinery	330.4	1.2	1.8
Motors and generators	337.7	0.1	4.5
Motor trucks (10,000 lb and under)	280.8	0.1	3.0
Office and store equipment	154.3	−1.0	0.3
Paperboard	269.3	2.7	10.3
Paper boxes and shipping containers	255.0	1.0	2.9
Paper office supplies	233.6	0.9	3.0
Paint	266.9	0.5	0.8
Plastic resins	305.0	0.3	7.7
Precision measuring tools	245.4	0.0	0.8
Pumps and compressors	346.3	0.1	−1.0
Refractories	357.0	0.6	5.7
Rubber belts and belting	336.8	1.4	4.0
Scales and balances	229.5	0.7	1.7
Steel products	360.4	0.3	3.4
Switchgear	272.4	1.3	−0.2
Textiles, synthetic fibers	161.5	1.4	5.5
Textiles, gray fabrics	152.8	0.0	5.9
Tires and tubes	243.0	0.0	−3.0
Transformers and power regulators	219.9	−1.6	−1.6
Welding equipment	276.9	0.3	−1.0
Wire and cable	201.8	0.0	−1.7

Industrial prices



Source: Bureau of Labor Statistics



Source: Steel Service Center Institute, NAPM Steel Buyers Committee

time around is the nonferrous metals sector. Price advances over the past month or two have been recorded in copper, zinc, lead, nickel, and a host of minor metals including cobalt, mercury, tungsten, magnesium, and silicon.

Steel prices, too, are steadily inching up. True, the official government index here suggests that current levels are only averaging about 3½% above a year ago. However, this doesn't fully reflect the slow drying up of discounts and other forms of shading that have probably added as much as another 6-7% onto average quotes vis a vis year-earlier levels.

Also heading up are many building materials, reflecting the still-booming housing market, where starts have been running near a 2-million-unit annual rate. Not surprisingly, price increases here have hit lumber, plywood, sand, gravel, brick, and asphalt paving materials—with the overall average now running about 5% above last year at this time.

Paper products, too, are on the upswing. Hefty increases since the beginning of the year, for example, have hit fine papers, newsprint, linerboard, and corrugated boxes.

Plastic resins have moved up equally as fast. Year-to-year advances are averaging near 8%, and new increases are hitting such popular materials as polyethylene, polypropylene, polystyrene, and ABS resins. But organic chemicals have remained a bit more sluggish, with advances generally falling short of producer announcements.

STEEL SCENE

Increasing demand to continue

Figure on continuing increases in steel demand—though the advances will not be quite as robust as those racked up during the first few months of 1984.

Both buyers and steel service centers are pretty much in agreement on this score. On the purchasing front, for example the 30% who contemplate increased deliveries over the next few months is somewhat less than the 36% of the previous month. Equally significant, some 16% now plan to take in less metal (versus only 6% just one month ago).

Distributors responding to the latest Steel Service Center Institute (SSCI) survey tell virtually the same story, with 52% anticipating order gains over the next three months, down substantially from the 80% and 75% readings of February and March respectively.

But few seem really worried. SSCI President Andrew G. Sharkey, for example, is still betting that shipments for the year as a whole will approach the 19-million-ton mark, making for the best showing since 1979.

The flat-rolled market, according to Sharkey and other SSCI spokesmen, remains the strongest, running nearly 40% ahead of a year ago during one recent month. But other sectors are beginning to pick up, too. The daily shipping rate is beginning to rise for plates, bars, structurals, and tubes.

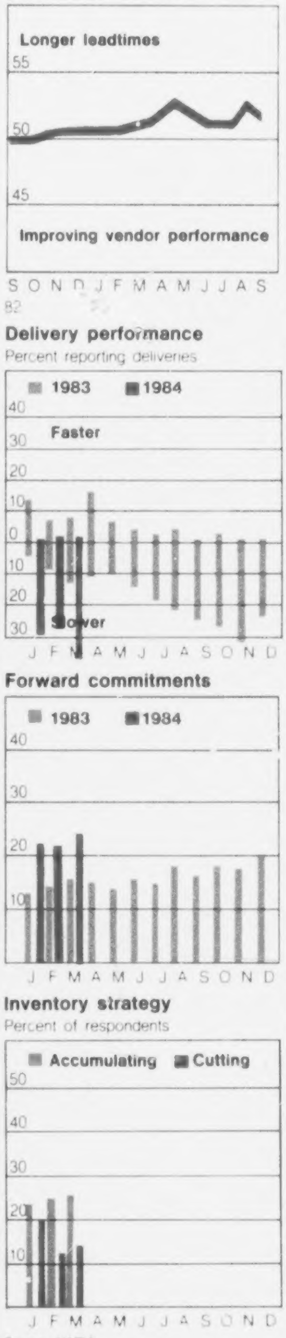
Nevertheless, overall buying has been brisk enough to cause some availability problems. Items mentioned by distributors as being possible headaches include coated sheet, cold-rolled sheet, hot-rolled sheet, plate, and stainless.

The nation's big steel buyers seem to confirm this trend toward increasing tightness, with coated sheet and cold-rolled sheet both mentioned by 20% or more of the survey respondents. Equally significant, some 40% of all buyers admit to some supply availability questionmarks over the coming six months.

This, in turn, is making for some second thoughts about further inventory cutbacks. In any event, months' supply ratios are starting to bottom out as both distributors and buyers begin adding a little bit extra—just in case. Note, for example, that the latest months' supply readings for both groups are fractionally higher than for the previous month.

Meantime, imports continue to figure heavily in overall buying plans—and with good reason—as the U.S.-overseas price gap persists. For instance, a big 29% of the service centers buying foreign metal note differentials of 11-20% in stainless. And the 16% who note the same gap for carbon types is also quite impressive.

Monthly procurement status report



Leadtime index

A "diffusion" index based on 158 key commodities. Above "50" indicates a tendency for leadtimes to stretch out. Below "50" suggests improving vendor performance.

Delivery performance

Percent reporting deliveries

Forward commitments

Inventory strategy

Percent of respondents

Source: NAPM

PROCUREMENT STATUS

Leadtimes still stretching

The inexorable stretchout in leadtimes continues.

To be sure, few items are in really critically short supply, notably selected electronic components and a few scattered steel items. But delivery performance is hardly worth shouting about. The latest NAPM business survey report finds that 27% of the respondents are currently being hit with slower deliveries, and only a miniscule 2% are getting things faster.

PW's exclusive leadtime index tells much the same story. The latest reading of 52 suggests a modest stretchout (50 is neutral, or no overall change)—pretty much in keeping with the trend of the past year or so. But that reading isn't all that bad compared to the late 1970s (during the last business boom) when index readings as high as 55 and 56 were not uncommon.

The situation is perhaps best summed up by one buyer, who notes, "I can't say we're faced with all that many shortages. But we're doing a heck of a lot more expediting to make sure deliveries get here on time—or at least with as little delay as is humanly possible."

Others add that what makes matters so critical is the recent trend toward just-in-time deliveries. They note that the wide tolerances for slippage just aren't there anymore.

Also indicative of more concern are:

- *Increases in forward purchases.* More than one out of three buying executives surveyed now are saying they're committing 90 days or more in advance for production materials. That's a sharp contrast to a year ago when the comparable figure was only 15%.
- *Rising inventories.* Some 26% were reporting additions at latest report—the highest such number in nearly 5 years (July 1979). The number of those paring, meantime, continues to diminish, from 20% in January to only 14% currently.

Leadtimes and availability

Chicago: Caustic soda has come in a bit to less than half a week. Ditto softwood sheathing (1 week) and plyform (2). But nonferrous metals are stretching. Aluminum coil and sheet are sometimes in excess of 16 weeks. Also out are aluminum plate (12), aluminum angles and bars (6-8), brass and copper sheet (16-18), brass rod (4-5).

Cleveland: Plastic resins have stretched out another week, with 3-4 weeks now needed for polyethylene and PVC. Drums remain unchanged: 2-ply fiber (2), steel reconditioned (1-2), and steel canisters (6). Ditto, lumber (3), alloying materials (on demand), glassines and greaseproof papers (4-5), and plastic shrink film (3).

Los Angeles: Mixed trends here—mostly up. Going out to these new, higher leads are grey iron castings (8-10), brass castings (12-14), electromecnanical devices (12-14), specialty wire (8), fasteners (8-10), semiconductors (30), and printed circuit boards (12). In are galvanized steel (16), alum. pipe (13), passive components (20).

BUSINESS DATATRAK

Houston: A few heavy equipment items have come in a bit, with these new, monthly waits: reciprocating compressors (6-12), centrifugal compressors (10-12), pumps (6-10), and boilers and furnaces (7-9). But there are a few offsetting stretchouts: field-fabricated pressure towers (7-12) and turbogenerators (6-16).

Philadelphia: Somewhat longer leads (in weeks) are noted for aluminum bar, sheet, and extrusions (6-8), and carbon steel bar round shapes from the mill (6-8). Some tightness is expected in corrugated, too. But plastic sheet (polyethylene, polypropylene, and polystyrene) has come in (to 4-6); polyethylene bags, unchanged at 3.

Pittsburgh: Polyvinyl chloride resins have moved out an additional week (to 6). But magnesium delays have been halved (to 3). Other relatively unchanged leads prevail for steel strapping (2-3), coil coating paint (4), mill quantities of copper fabricated products (6), multiwall bags (6), drums (1), and corrugated boxes (3-4).

Leadtimes (in weeks)

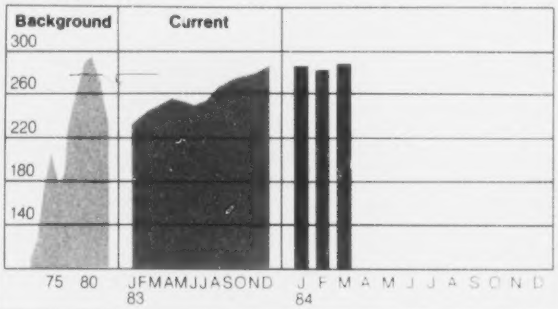
	Now	Month ago	Six months ago
STEEL			
Sheet (Phil)	9	9	7
C-R Sheet (Chgo)	8	8	10
Plate (Phil)	10	10	6
Plate (Chgo)	6	6	3
Reinforced (Hous)	6	6	6
H-R Bars (Phil)	7	7	4½
H-R Bars (Chgo)	3	3	2½
Cold-Drawn Bars (Phil)	7	4½	4½
Galvanized (LA)	16	20	7
Galvanized (Chgo)	9	9	7
Structurals (Chgo)	3½	2½	2½
Structurals (Hous)	17	17	15
Tubing (Phil)	7	7	6
Grey Iron Castings (LA)	9	6	7
Steel Castings (Hous)	11½	11½	11½
Forgings (Hous)	7	7	7
Pipe, Carbon (Hous)	13	13	13
ELECTRIC & ELECTRONIC			
Cables (Chgo)	8½	8½	8½
Capacitors (Chgo)	16	16	13
Circuit Breakers (Chgo)	6	6	6
Electromech. Devices (LA)	13	9	8
ICs (Linear) (Phil)	20	20	11
Motors (Phil)	21	21	21
Motors, 1000 hp & Up (Hous)	39	39	39
Printed Circuit Boards (Chgo)	17	17	7
Relays (Chgo)	15	15	15
Resistors (Chgo)	10	10	10
Resistors, Wirebound (Phil)	10	10	10
Transformers (Chgo)	10	10	10
LUMBER			
Hardwood (Pgh)	3	3	3
Hardwood (Clev)	3½	3½	3½
Plywood (Chgo)	1½	1½	2½
Plywood (Phil)	1½	1½	1½
Softwood (Clev)	3	3	3
Softwood (Phil)	1/5	1/5	1/5
Softwood (Pgh)	3	3	3
Particleboard (Phil)	2½	2½	2½
CHEMICALS-PLASTICS			
Adhesives (LA)	½	½	½
Napthalene (Chgo)	2	2	2
Paint (LA)	5	4	4
Paint, Coil Coating (Pgh)	4	4	4
Paint, Maint. (Cleve)	3	3	2
Polyester Resin (LA)	2	2	2
Polyethylene Resin (Cleve)	3	3	2½
Polyethylene Resin (Pgh)	4	4	4
PVC Resin (Chgo)	2	2	2½
PVC Resin (Pgh)	6	4	4
Titanium Dioxide (LA)	1	1	1
PACKAGING			
Bags, Kraft (Pgh)	5	5	5
Bags, Multiwall (Clev)	9	9	9
Bags, Multiwall (Pgh)	6	6	6
Cartons, Corrugated (Cleve)	3	3	3
Cartons, Corrugated (Hous)	3	3	3
Cartons, Folding (Phil)	6½	6½	6½
Cartons, Folding (Pgh)	3½	3½	3½
Cellophane Wrap (Phil)	5	5	5
Plastic Bags (Pgh)	3½	3½	3½
Plastic Pkg. (Pgh)	3	3	3
Shrink Film (Chgo)	4	4	4
Shrink Film (Clev)	3	3	3
Drums, Fiber (Pgh)	1	1	1
Drums, Steel, Std. (Pgh)	1	1	1
Wood Pallets (Chgo)	2½	2½	2½
Wirebound Boxes (Pgh)	4½	4½	4½
Strapping (Clev)	2½	2½	2½
Strapping (Pgh)	3	3	3
PAPER			
Fiberboard (Clev)	3½	3½	3½
Glassine (Clev)	4½	4½	4½
Glassine (Pgh)	5½	5½	5½
Groundwood (Clev)	4½	4½	4½
Groundwood (Pgh)	7	7	7
Kraft (Clev)	1	1	1
Kraft, Bleached (Clev)	1	1	1
Kraft, Bleached (Pgh)	5	5	5
Kraft, Natural MFNS (Clev)	1	1	1
Laminated (Clev)	8	8	8
Tissue (Pgh)	5½	5½	5½
NON-FERROUS			
Aluminum Coil (Chgo)	15	15	11
Aluminum Plate (Chgo)	12	9	9
Aluminum Sheet (LA)	4½	4½	4½
Aluminum Sheet (Chgo)	15	15	14
Brass Castings (LA)	13	7	7
Brass Rods (Chgo)	4½	3½	3½
Brass Sheet (Chgo)	17	15	8
Brass Tube (Chgo)	9	9	9
Copper Fittings (LA)	3½	3½	6½
Copper Mill Prod. (Pgh)	6	6	6
Copper Tube (LA)	5½	5½	6½
Copper Tube (Phil)	6	6	6
Lead (Pgh)	2	2	2
Magnesium (Pgh)	3	6	2
Manganese (Clev)	1	1	1
Nickel (Clev)	1	1	1
Nickel (Pgh)	2	2	2
Silicon (Clev)	1	1	1
Tin (Pgh)	3	3	3
Wire, Specialty (LA)	8	6	5
Zinc (Pgh)	6	6	2
MISCELLANEOUS			
Bearings, Domestic (Phil)	2½	2½	12
Bearings, Foreign (Phil)	26	26	26
Boilers & Furnaces (Hous)	35	35	35
Compressors, Centrifugal (Hous)	48	52	52
Compressors, Reciproc. (Hous)	39	43	39
Fasteners (Chgo)	1½	1½	½
Fasteners (LA)	9	6	4
Fasteners, Std. (Phil)	2	2	2
Heat Exchangers, Carbon-alloy Steel (Hous)	20	20	20
Heat Exchangers, Hi-pressure (Hous)	21	21	21
Insulation Mat'l. (LA)	7	7	7
Machined Parts (Hous)	9	9	9
Pipes & Valves (Chgo)	2	2	1
Pumps (Hous)	35	39	39
Pumps (LA)	9	9	9
Rubber, Synthetic (LA)	2	2	2
Rubber Hose (LA)	4	4	4
Tungsten Carbide Parts (Hous)	15	15	15
Valves, Cast Steel (Hous)	6½	6½	8
Welding Supplies (Hous)	5	5	5

BUSINESS DATATRAK

Raw material price barometer

Index: 1967 = 100

Latest month	**289.2**
Month before	**283.6**
Year ago	**248.8**



Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	347.00	347.00	347.00
Steel, structural shapes, Pitts., cwt	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt	24.40	24.40	24.40
Steel, bars, dlvd. Phila., cwt., merchant quality	17.50	17.50	17.50
Steel, bars, Pitts., cwt	17.50	17.50	17.50
Steel, bars, C.R., Pitts., cwt	26.00	26.00	26.00
Steel, plates, Pitts., cwt	23.25	23.25	25.75
Steel, plates, H.R., Pitts., cwt	23.25	23.25	25.75
Steel, sheets, C.R., Detroit, cwt	27.10	27.10	26.15
Steel, strip, C.R., Chi., cwt	35.30	35.30	29.05
Steel, basic wire, Pitts., cwt	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	0.698	0.715	0.630
Antimony, in alloy, lb.	2.00	2.00	2.00
Beryllium-copper, cost ingot, lb.	5.20	5.20	4.95
Brass, red, 85%, [sheet], lb.	1.30	1.25	1.28
Brass, yellow, [sheet], lb.	1.25	1.20	1.22
Cadmium, ton lots, lb.	1.50	1.50	1.00
Copper, electrolytic, wire bars refd., lb.	0.75	0.70	0.80
Copper sheet, over 24 in., lb.	1.39	1.34	1.37
Lead, common, N.Y., lb.	0.26	0.24	0.21
Magnesium, pig ingot, [99.8%], lb.	1.43	1.43	1.34
Mercury, 20 fl. lots, N.Y., fl.	322.00	300.00	330.00
Molybdenum Climax Oxide/bags, lb.	4.65	4.65	4.65
Nickel, electrolytic, producer, lb.	3.20	3.20	3.20
Platinum, producer, oz.	475.00	475.00	475.00
Silver, N.Y., oz.	9.23	9.82	11.24
Tin, Straights, N.Y., lb.	6.36	6.45	6.90
Zinc, Prime West, East St. Louis, lb.	0.53	0.51	0.38
Zinc, die casting alloy, No. 3, lb.	0.595	0.575	0.465
PAPER			
Uncoated book #3 offset, ton	810.00	810.00	680.00
Watermarked bond, ton	985.00	985.00	845.00
Gummed sealing tape, carton	15.45	15.45	15.50
Boxboard, mach. clay ctd. recycled sheets 80 bright, .016, ton	475.00	475.00	475.00
Wrapping paper, std. distributor cost, kraft, basis wt. 50 lb., roll	28.00	28.00	28.00
Kraft linerboard, 42 lb., unbleached, ton	320.00	320.00	270.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd.	0.306	0.306	0.269
Cotton drill, 1.85, 59", 68x49, N.Y., yd	1.04	1.03	0.95
Cotton middling, 1", N.Y., lb	0.763	0.733	0.658
Printcloth, 48", 80x80, N.Y., spot, yd	0.82	0.80	0.57
Army duck, 37", 13 oz., yd	1.79	1.79	1.60
Blended printcloth, 64", 78x54, yd	0.760	0.725	0.670
20s combed yarns	2.16	2.14	1.68
Wool tops, N.Y., lb.	3.60	3.60	3.60
CHEMICALS			
Acrylonitrile, tanks, lb	0.455	0.430	0.430
Ammonia, anhydrous, fertilizer, wholesale, tanks, ton	210.00	210.00	150.00
Benzene, petroleum, tanks, Houston, gal.	1.48	1.43	1.46
Caustic soda, 76% solid, drums, carlots, cwt	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb.	0.58	0.58	0.66
Formaldehyde, USP, 37% [12% to 15% meth.], tanks, lb.	0.106	0.106	0.106
Glycerine, synthetic, tanks, lb.	0.81	0.81	0.73
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	0.450	0.450	0.715
Naphthalene, crude, tanks, lb.	0.22	0.22	0.22
Phthalic anhydride, tanks, lb.	0.305	0.305	0.255
Polyethylene resin, low density liner film grade (market price), lb.	0.43	0.42	0.32
Polypropylene, homopolymer grade (market price), lb.	0.42	0.41	0.34
Polystyrene, general purpose grade (market price) lb.	0.45	0.44	0.37
Shellac, bone dry, N.Y., lb.	1.65	1.65	1.65
Soda ash, 58%, light carlots, cwt	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	0.35	0.35	0.30
Sulphur, crude, ex-terminal, Tampa, Fla., lt.	140.00	140.00	135.00
Sulphuric acid, 66%, commercial, tanks, ton	56.35	56.35	56.35
Titanium dioxide, anatase, reg., carlots lb.	0.69	0.69	0.69
Xylene tanks, gal.	1.35	1.35	1.42
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	324.55	316.85	321.45
Lumber, 2x2, pine, mbf, cl	324.45	315.30	319.10
Plywood, plyform, ¾" msf, cl	570.30	562.05	541.95
Plywood, ⅝", msf, cl	371.40	364.10	351.05
Cement, bulk, ton, tl	62.24	62.44	62.34
Sand, ton, cl	6.19	6.13	5.94
Ready-mix concrete, 3,000 psi/cu yd., 15 cu. yd	45.67	45.47	45.84
Crushed stone, 1½", ton, cl	7.87	7.87	7.88
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.76	0.76	0.75
Gypsum sheathing, ½"x1"x8", msf, tl	198.97	199.34	161.51
Brick, common, per thousand, tl	173.88	172.78	173.55
Asphalt paving, AC-20	163.82	163.54	157.27
Concrete sewer pipe, 12", prem. joint, per foot, cl	6.80	6.79	6.78
FUELS			
Fuel oil, No. 6 or Bunker C, Gulf., bbl.	27.50	24.75	23.00
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	31.40	32.15	27.75
Gasoline, 91 oct., reg., Los Angeles, rack, gal.	0.860	0.790	0.755
Gasoline, 94 oct., reg., Chi., tank car, gal.	0.830	0.805	0.826
Heating oil, No. 2, Chi., bulk, gal.	0.800	0.789	0.730
Heating oil, No. 2, N.Y., bulk, gal	0.873	0.838	0.778
Heavy fuel, PS 400, Los Angeles, rack, bbl.	26.25	26.25	24.10
Jet kerosene, gal	0.800	0.795	0.775
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	0.425	0.440	0.465
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	102.00	100.00	73.00
Steel, No. 1, hvy., dlvd., Chi., ton	84.00	88.00	73.00
Copper, No. 1, East, wholesale buy, dlvd., lb.	0.655	0.625	0.690
Copper, No. 2, East, wholesale buy.	0.560	0.530	0.600
Brass, red, East, wholesale buy, dlvd., lb	0.615	0.585	0.650
Brass, yellow, East, wholesale buy, dlvd., lb.	0.398	0.383	0.360
Alum., old sheet/cast, E., wholesale buy, dlvd., lb.	0.505	0.495	0.325
Alum., mixed clip., E., wholesale buy, dlvd., lb.	0.515	0.510	0.340
Zinc, old, East, wholesale buy, dlvd., lb.	0.185	0.185	0.080
Lead, clean solids, East, wholesale buy, dlvd., lb.	0.145	0.140	0.120
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	32.00	30.00	10.00
Paper, old corrug. box, dlr., N.Y., ton	29.00	27.00	10.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb.	0.135	0.130	0.100
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb.	0.34	0.34	0.36

[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]

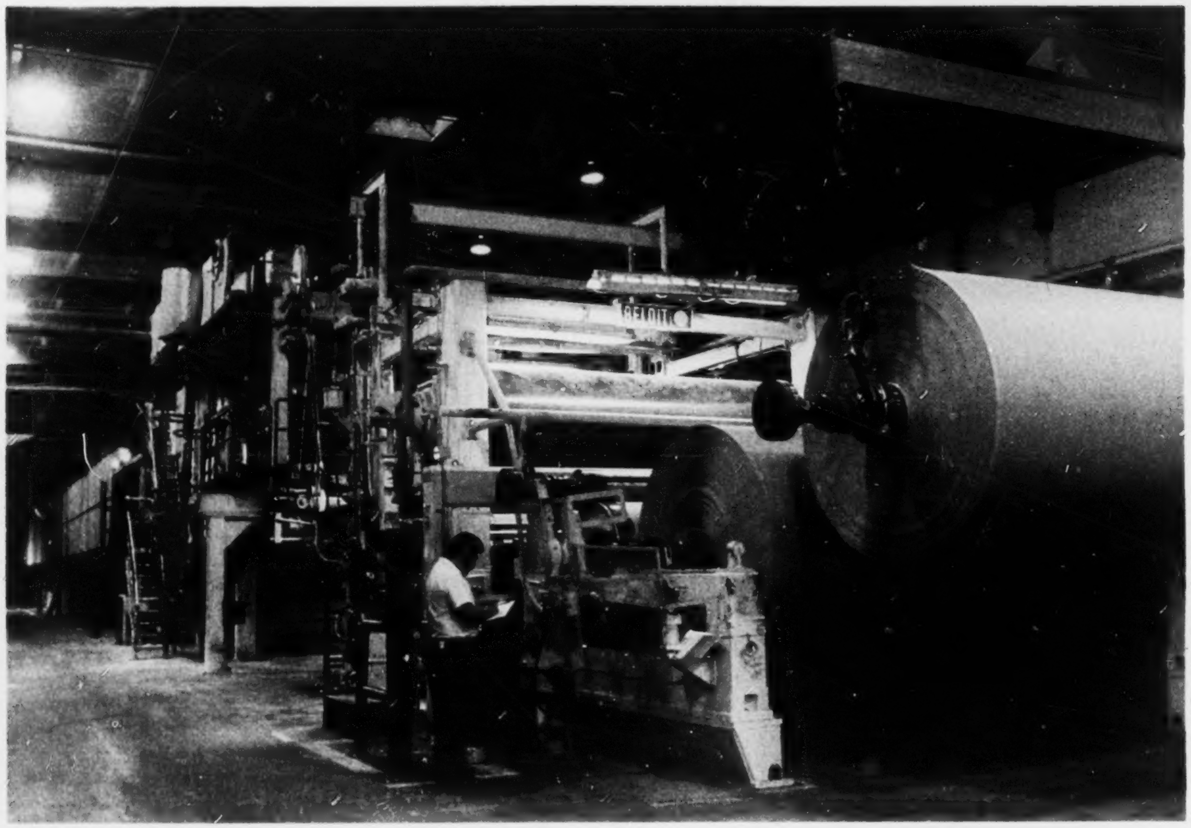


Photo courtesy of Container Corp. of America

Packaging markets: Purchasing feels the pressure

Robert S. Reichard, executive editor

The nation's packaging buyers have their work cut out for them.

Near-term, they'll be busy parrying price-boosting thrusts that are already beginning to hit virtually every major material—paper, metal, glass, and plastics. Some delivery stretchouts seem a foregone conclusion as the economic recovery goes into its second year.

True, some of these price and supply pressures could ease off a bit in 1985 and 1986 as business gains slow down. But some of the longer-term problems (or challenges) will persist for purchasing managers. They will have to be concerned with the complex task of evaluating and choosing among the growing number of new products and designs that will be coming on the market in years immediately ahead.

The above appraisal is pretty much the consensus—not only of buyers, but also of vendors and packaging consultants—all of whom have been queried in a new *Purchasing World* analysis of this crucial industry which currently accounts for almost 5% of the nation's entire output of goods and services.

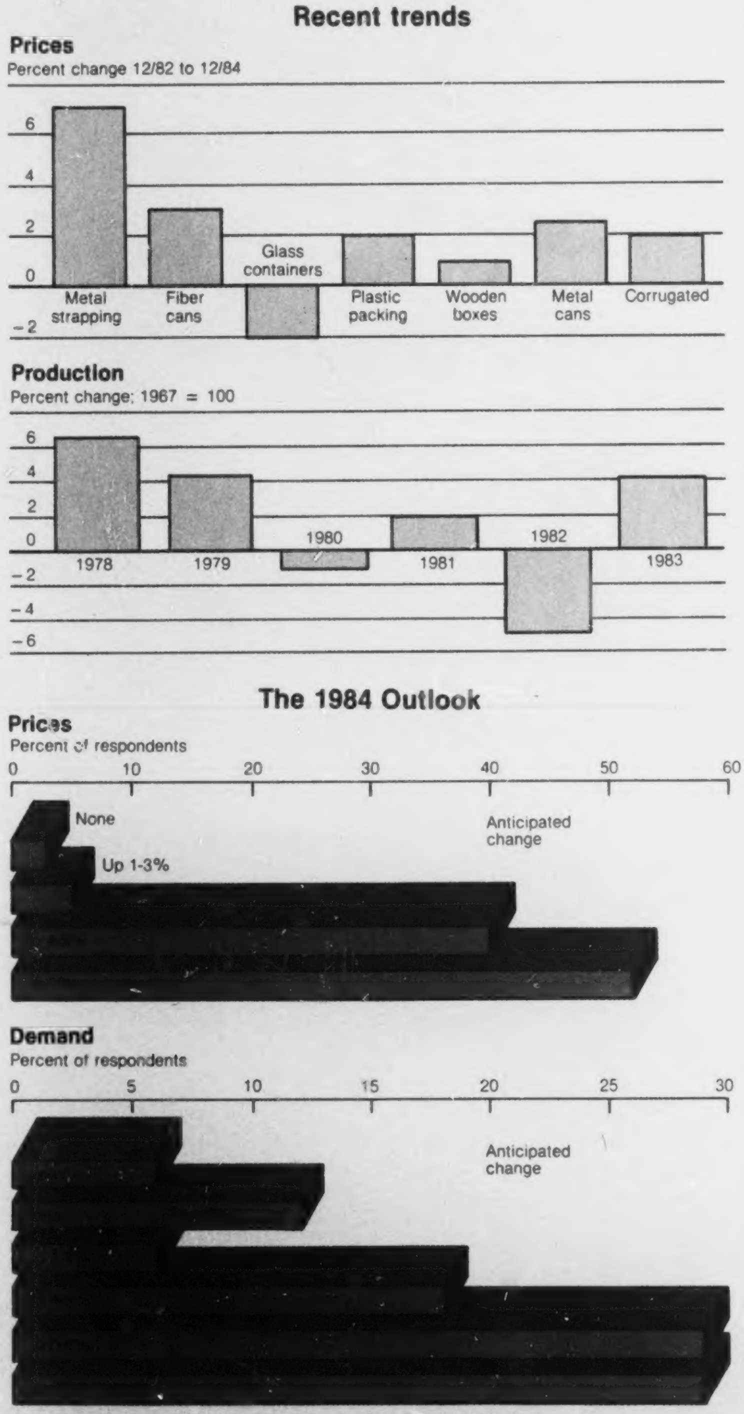
Please turn the page for a graphic overview of how packaging markets are faring today and are likely to change in the future.

Some of the key findings and trends revealed by the just-completed study:

- *1984 prices.* Even with near-heroic efforts, buyers are now reconciled to a 5% or slightly higher increase in overall packaging costs this year—all in marked contrast to the near-stable quotes (and even a few declines) that they had experienced through most of last year. In any event, it's hard to shrug off the finding that more than four out of every five respondents expect a sizable acceleration in the rate of price increase this year.
- *Near-term demand.* The majority of purchasing managers see a 5% or larger increase in their real or physical packaging needs this year. That's not only above 1983's estimated 4% advance, but enough to set new all-time records for most packaging modes. The lion's share of the projected advance will be to meet increased consumption—but a not insignificant part will also reflect some inventory rebuilding.

...continued

Packaging markets: an overview

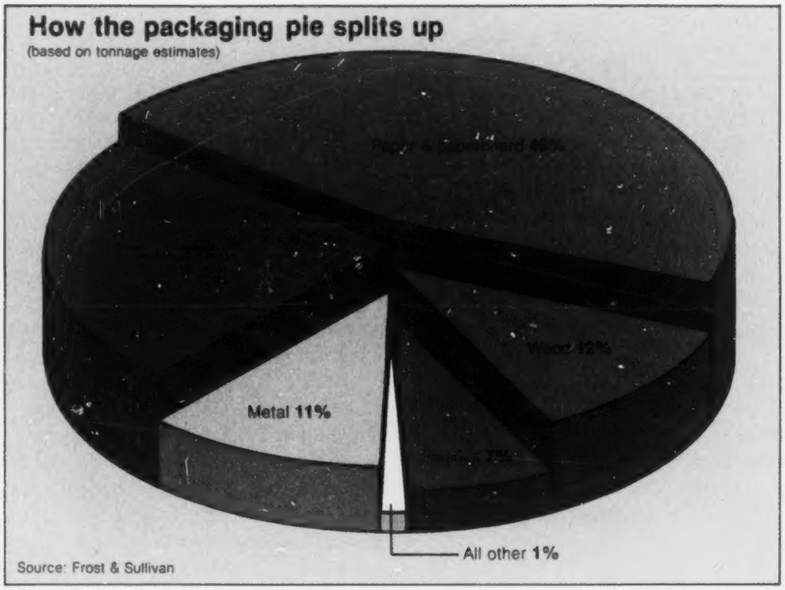


Sources: Bureau of Labor Statistics, Federal Reserve Board, PurchasingWorld

- *Near-term supply.* There's some concern about longer leadtimes—particularly in the paper sector (as paper-board mills operate at pretty much near-full capacity). Also worth noting: More than 50% of the PMs contacted said they expected to have some kind of procurement problem over the remainder of the year—with non-paper products such as plastic film and foil laminates also put on some of their "areas of concern" list.
- *Long-term demand.* Things should quiet down after the current year—reflecting both the refilling of inventory pipelines and the somewhat less ebullient GNP increases now being projected for 1985 and beyond. Best bet for the next five years: Average packaging gains in the 2-4% range—pretty much in line with general economic growth. One exception: Plastics where advances could run anywhere from 1½-2 times the GNP increase.
- *A changing mix.* All sources agree that package proliferation and change is the name of the game—with the basic emphasis continuing to be on the development of less costly constructions that provide the same or better protection and promotional impact. Plans in the works, for example, not only call for the introduction of still thinner gauges but also upgrading through the use of better materials and graphic designs.

Among other things, this implies (1) continued rivalry between aluminum and steel for the can market, (2) increased competition among glass containers, metal cans, and plastic bottles . . . both in the food and nonfood spheres, and (3) further flexible packaging inroads into traditional rigid packaging applications.

Then, too, packaging is becoming more of a custom than a commodity purchase—as both buyers and sellers zero in on specific product applications. This latter development, in turn, will require still more changes—namely the need for closer vendor-buyer relationships, more product testing, increasing emphasis on



How the packaging pie splits up
(based on tonnage estimates)

Source: Frost & Sullivan

quality as packaging lines become more automated, and finally, the willingness to explore new, more radical approaches.

On the latter score, Campbell Soup has already strongly hinted that the days of the traditional tin soup can are numbered. Thus the company is said to be ready to emphasize more convenience-oriented containers like aseptic boxes and plastic microwaveable bowls. These innovative packaging forms would eliminate such present day inconveniences as the need for a can opener, mixing the soup with water, heating, and even the cleaning of utensils.

More about these and other technological developments in the story that begins on page 56. But, first some further comments on where the industry is today, and, more important, how market trends seem to be shaping up over the next few years on a product-by-product basis.

Packaging's role in the economy

It's difficult to put a precise overall dollar figure on the amount of money earmarked for packaging. But, if one includes such diverse items as rigid containers, semi-rigid containers, flexible packaging—as well as such component products as caps, closures, twine, labels, inks, and tapes—then a figure in excess of $70 billion a year doesn't seem to be all that much out of line.

More significant, however, is the role that packaging plays in purchasing—with a surprisingly large number of buyers estimating that 5% or more of their overall purchase mix goes for some form of packaging. But even this doesn't tell the whole story. One big brewery responding to PW's new survey, for example, notes that packaging accounts for more than 50% of its total procurement dollars. Then, too, the percentage for many food companies runs in the 20% range and higher.

The raw material suppliers of these packaging items have an equally important stake in both near-term and longer-term trends. Just how much of a stake is suggested in a recent Frost and Sullivan study which finds that more than 50% of all converted paper and paperboard goes into some form of packaging.

The percentages for other materials are almost as impressive—with packaging accounting for 45% of all the glass produced, 25% of all plastic resin, 23% of all aluminum, 8% of all steel, 37% of all inks, 35% of all pressure sensitive tapes, and 25% of the dollar value of adhesives.

Packaging's role in the economy can also be viewed from still another vantage point—namely the portion of the overall mix earmarked for specific materials. As might be expected, paper packaging is still the number one purchase item—primarily because nearly every product sold requires some type of corrugated carton. Add in other types of boxes and flexible wrapping—and some 46% of all packaging on a tonnage basis goes for some kind of paper (see chart).

The figure, supplied by Frost and Sullivan, also suggests that other current packaging shares—in descending order of importance: glass (23%); wood, including pallets and skids (12%); metal (11%); plastics (7%); and all other (1%).

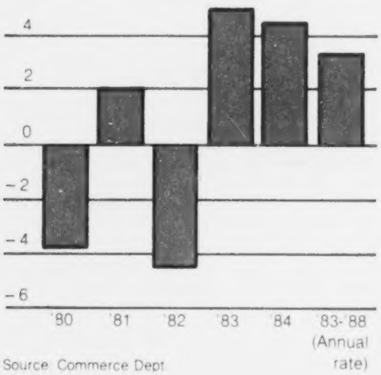
Plastics may be at the bottom of the list, but it is now, and will continue to be, the fastest growing component by a wide margin. These versatile synthetic materials look to be the big winner over the next few years—capturing more of the market from competing materials.

A closer look at corrugated

Lest there be any doubt on the crucial role played by corrugated cartons, take a look at the latest government figures which show that U.S. industry shelled out more than $11 billion last year for these containers. In quantitative terms, some 252.9 billion square feet were shipped in 1983. Add another 4-5% gain for the current year, and the total for 1984 could approach 265 billion square feet.

Box capacity seems more than adequate to meet this projected total. But there is some concern about linerboard (the basic material)—with mills expected to operate at 96-97% of their rated capacity this year according to a recent Dean Witter Reynolds estimate. That's some three percentage points above last year and more than 10 percentage points above the low 84.5% figure

Corrugated cartons
(% change in real demand)



Source: Commerce Dept.

reported in recession-ridden 1982.

Booming demand here will, of course, impact on prices. Thus buyers responding to PW's new survey generally put 1984 corrugated increases in the 5-15% range—with the overall advance averaging somewhere near 10%.

On the other hand, there should be enough unbleached board to go around to avoid any really serious across-the-board shortages and hence spiralling prices. As one paper spokesman recently put it, "We should manage to get through the current period without too much sweat—as new capacity comes on stream at near a 1½% annual rate through 1986, and mills make adjustments to squeeze out just a bit more board."

The longer pull also suggests a basically livable situation—with corrugated demand expected to grow at a relatively moderate 3-3½% annual rate over the 1983-1988 period.

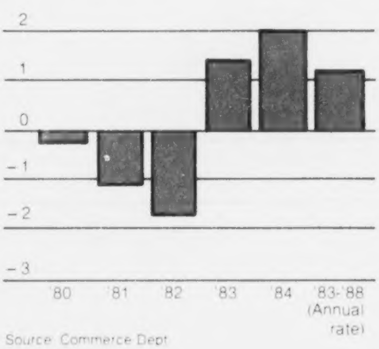
Major innovations over this extended time span will include further development of multiwall box technology, increased use of flexography in color printing, improvements in graphic design, and the development of adhesives that will be compatible with steadily increasing corrugator machine speeds.

Other paper packaging products

While corrugated obviously dominates, it's hard to ignore such other big segments of the paper packaging industry as folding boxes, sanitary food containers, bags, and set-up paperboard boxes—where dollar billings last year were put at $4.0 billion, $2.8 billion, $5.2 billion, and $0.5 billion, respectively. But for the most part these sectors are all relatively slow growth areas. Looking at each of them separately:

- *Folding cartons.* This packaging mode is less dependent on overall GNP than on consumer spending—and should therefore show only about a 2% gain this year. Nevertheless, prices are expected to rise anywhere from 5-10%—with the actual amount depending on both geographical location and bargaining leverage.

Folding paperboard boxes
(% change in real demand)



Source: Commerce Dept.

The 5-year outlook, meantime, suggests even slower growth. Right now advances of just over 1% a year are anticipated—as competition from plastics and other types of paperboard containers takes its toll.

- *Sanitary food containers.* A 1% decline is expected for 1984—making for the sixth straight year of falling demand. The drop-off primarily reflects the lingering impact of reduced milk container shipments. True, the longer-run 1983-88 period suggests a modest turnaround—maybe 1% average annual increases—as the positive effects of the industry's new ovenable and aseptic product lines begin to become more apparent.
- *Bags.* A fair-sized 3% real gain in demand is anticipated for the current year, though this will in large part be due to increasing use of plastic bags which are counted in this industry group (SIC 2654). As for prices, paper types are expected to rise by as much as 8-10% this year—with plastic types, including films, expected to increase between 5-8%.

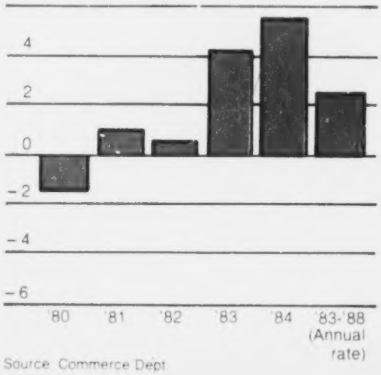
The long-run demand picture isn't much different—2% annual gains, with inceasing inroads by plastics which are expected to account for 65-70% of the total real value of bag shipments by 1988. On the plastics' fronts, for example, good growth is projected for film bundling (shrink and stretch) which will capture an increasing market share from corrugated. And retort food pouches, constructed of layers of plastic film and aluminum foil, will finally begin to show significant increases after several years of disappointing growth.

- *Set-up rigid paperboard boxes.* All signs point to about 2% real gain this year—slightly in excess of 1983's 1.7% advance. And for the more extended 1983-88 period, little more than 1½% annual rate of increase is contemplated—as competition from folding boxes and plastics continues. That's hardly earthshaking, but a lot better than the past 10 years when real shipments in this sector were dropping at near a 5% annual rate.

The metal can outlook

Look for continued good demand

Metal cans
(% change in real demand)



Source: Commerce Dept.

gains—with about 98.3 billion cans expected to clear the market this year—some 5.6% above 1983, which, in turn, was 4% above recession-impacted 1982. And, similar to last year, beverages will account for about two-thirds of all can shipments.

As for the battle between aluminum and steel—aluminum has made great strides—and now accounts for some 60% of all cans—up from only 33% just five years ago. Aluminum is also making some progress in the food (as contrasted to beverage) area. The metal now accounts for 4% of the food can total—and has been increasing share by about one percentage point a year. One thing for sure—the potential is large—about 30 billion food cans a year.

All the above is not to say that aluminum and steel have these markets to themselves. There is still plenty of infighting with other packaging modes—with major brewers now opting for glass in the light and premium beer market. In soft drinks, continued use of standard-size 16-ounce glass and plastic bottles is expected to add another restraint to overall can growth.

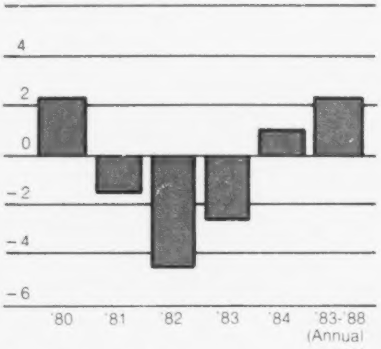
These competitive pressures notwithstanding, rising metal prices could push can prices up as much as 10% this year. Going further out into 1985 and 1986, however, price boosts should moderate—running about 5-7% a year. Somewhat smaller demand gains over the longer run are also forecast—with advances of only 2-3% a year seen through 1988 on a combination of demographic and life style changes—plus increasing inroads from plastic types.

Slow growth in glass

The traditional glass container is likely to show only a small 1% increase in total units this year (to 302 million gross). Blame it on increasing competition from other types of packaging, notably plastic bottles.

Glass containers

(% change in real demand)



Source: Commerce Dept

Nevertheless, the industry is in fairly good financial shape following (1) the recent phasing out of less profitable operations, (2) the relatively modest wage boosts negotiated over the 1983-85 period, and (3) favorable costs of such raw materials as silicon, soda ash, and limestone. These cost trends—plus less than sensational demand and increasing competition with other packaging modes—also suggest very modest prices increases (5% or less at annual rate)—both for the current year and probably into early 1985.

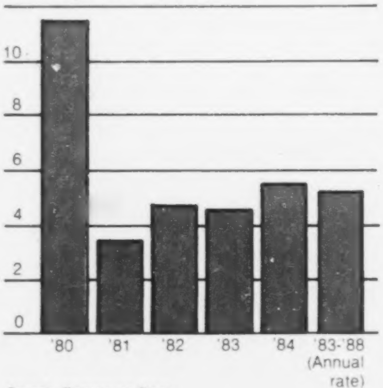
For the longer run, the industry is still fairly optimistic—talking in terms of a slightly larger than 2% annual rate of advance through 1988—though the plastic PET bottle could eventually eat into glass's big market for alcoholic beverages.

Plastic bottles: taking off

Bullishness is the order of the day for plastic bottles. Last year, for example, the industry grew 4.5%—increasing the number of units sold to 16.2 billion. And this year looks even better—with a 5.6% increase to 17.0 billion units anticipated.

Plastic bottles

(% change in real demand)



Source: Commerce Dept

Credit much of the gain to consumer acceptance of the PET bottle—though containers made of PVC have also recorded some gains lately and high density polyethylene continues to be the dominant resin overall—accounting for more than two-thirds of all plastic resin used in bottles.

The growth pattern of 5% or slightly more is also expected to continue beyond this year—with much of the gain predicated on PET's capture of an additional share of the soft drink market and the gradual penetration of PET bottles in such new areas as wine, distilled spirits, and beer. Worth noting on the latter score: PET has virtually displaced glass in the English beer-bottling market.

Other plastics, too, are beginning to look for a piece of the action—particularly in the chemical packaging field. Resins likely to show good gains here would have to include ethylene vinyl alcohol (EVAL), high molecular weight high-density polyethylene, and Du Pont's Selar. The prize again is big—with this market offering the potential of adding several additional million pounds to total plastic packaging demand.

For a more detailed description on how these and other technological innovations are already revolutionizing the industry—impacting on both in general and on purchasing strategy in particular—see the story following.

For buyers of packaging, the emphasis will continue to be on keeping an even more watchful eye on price and supply trends of the major packaging materials. As ***Purchasing-World's*** analysis suggests, each major packaging material—paper, metal, glass, and plastics—will display its own unique reaction to the uncertainties of an economic recovery that is entering its second year—and that an election year. **PW**

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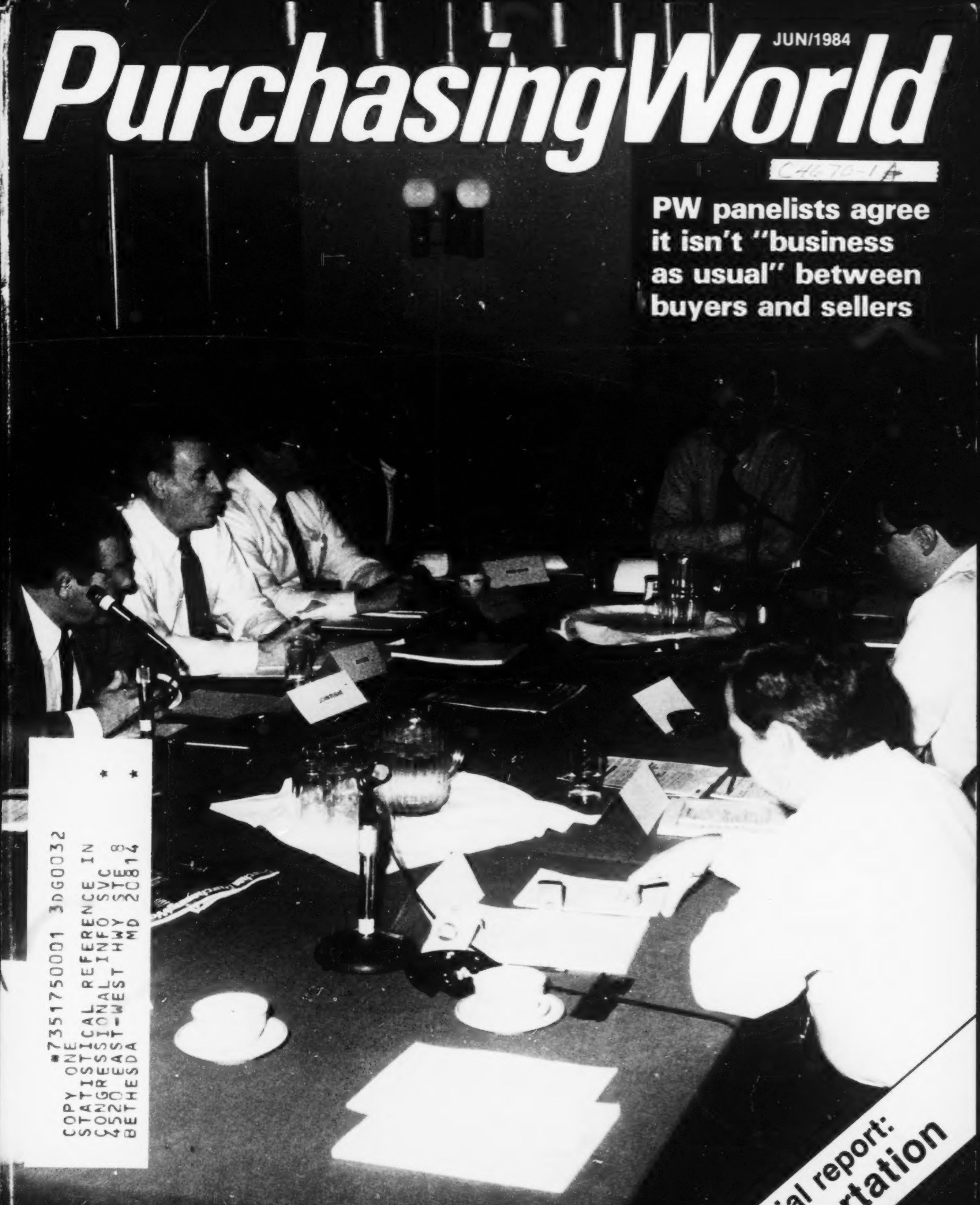

PW panelists agree it isn't "business as usual" between buyers and sellers

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Special report: Transportation

Vol. 28, No. 6-June 1984

PurchasingWorld

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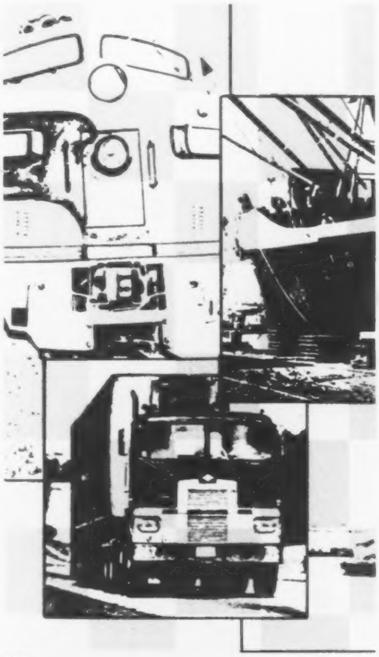

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Cover photo: Pictured on this month's cover are some of the panelists in PW's "roundtable" discussion. From left to right: John Pughe (Allied Corp.) Jim Kegg (Bethlehem Steel), Phil Taddeo (Scott Paper), Fred Mohr (Bearings Inc.), Paul Farrell and Rick Dunn (PW), Gerard Coiley (American Tobacco). Not shown but also participating were: Dick Baribault (Alcoa), Bob Howard (GTE Service Corp.), Don Shire (Air Products & Chemicals), Bill Devaney (Stanley-Vidmar), John Wuycheck (Preston Trucking), and Jim Lorincz (PW).

__PurchasingWorld__ (USPS 472 470) is published monthly by Huebner Publications, Inc., 6521 Davis Industrial Parkway, Solon, OH 44139. Printed in USA. Subscriptions: Available without charge to qualified purchasing executives in US manufacturing companies. Available to others in the US for $46/year, Canada $56/year. Foreign subscriptions are available for 70 airmail or £40 surface mail. Sole agent for all subscriptions outside the U.S.A. and Canada is J.B. Tratsart, Ltd., 154a Greenford Road, Harrow, Middlesex HA 13QT, England. Second class postage paid at Cleveland, OH, and additional mailing offices. Circulation and business offices: 6521 Davis Industrial Parkway, Solon, OH 44139. Editorial offices: 800 S. Northwest Highway, Barrington, IL 60010. *© Copyright 1984 by Huebner Publications, Inc., subsidiary of International Thomson Business Press—All rights reserved.* *ISSN 0093 1659.*

Postmaster: Send address changes to __PurchasingWorld__, 6521 Davis Industrial Parkway, Solon, OH 44139.

PW PREDICTS

Robert S. Reichard, executive editor

Putting price into perspective

Earlier fears of a major step-up in the rate of inflation seem to be disappearing.

True, there are still some purveyors of gloom and doom around who see another bout of double-digit inflation just around the corner. But, by and large, such pessimists are now few and far between.

Perhaps the most encouraging projections these days come from purchasing executives themselves. Responding to a new nationwide *PW* survey (details pg. 126), they see little more than modest near-term price acceleration—with a just-under-5% rate of advance anticipated over the next 12 months.

Equally important, this looks to be pretty much an across-the-board pattern. Thus, increases are expected to remain in the tolerable range for all kinds of products and services—including basic raw materials, component parts, machinery and equipment, energy, and freight. Average all the above together—and not one of the hundreds of PMs queried expects any return to double-digit price boosts.

And if further confirmation is needed, take a look at NAPM's 27th semiannual survey and economic forecast. To be sure, the overwhelming majority of queried buyers see price increases ahead. But only a miniscule 2% figure them to be severe—and only one in three feels that they will be across the board.

The two key cost elements of the price equation (labor and raw materials) would certainly seem to support this basically encouraging scenario.

- **Labor:** While payroll costs could rise about 6% this year, that would only be about a one percentage point acceleration over last year's results. Much of this restraint can be traced back to a still-cautious union stance—something which reflects both still relatively high unemployment rates and the fear that any really huge boost will result in still more job losses to foreign competitors.

And there's yet another plus factor here: continuing 2% or slightly higher increases in worker productivity. Combine this with the projection for a 6% increase in overall wage costs—and unit labor costs are likely to rise by only about 4% this year.

- **Materials:** It's almost too good to be true. But there's still no sign of any major upward push in basic raw material prices—despite nearly 18 months of solid business recovery. Over this period, for example, basic items (as measured by Uncle Sam's non-food crude material index) have managed only a small 3% advance. You have to go back a long way to find such restraint in these normally volatile prices. Credit the braking action to still-lingering overcapacity.

But whatever the reason, the results are clear: Up until now there has been very little upward material cost pressure on prices. And judging from latest supply-demand projections, there's precious little to suggest any change in this basic pattern over the next few quarters.

Blowmolded plastic containers

Figure on blowmolded plastic containers accounting for a much more substantial part of the typical buyer's packaging mix over the next few years.

At least that's how analysts at Frost and Sullivan see it. The big New York-based research firm anticipates that as many as 25.5 billion blowmolded units will clear the market by 1987—versus only 15.5 billion in 1982 and a better than 10% average annual gain.

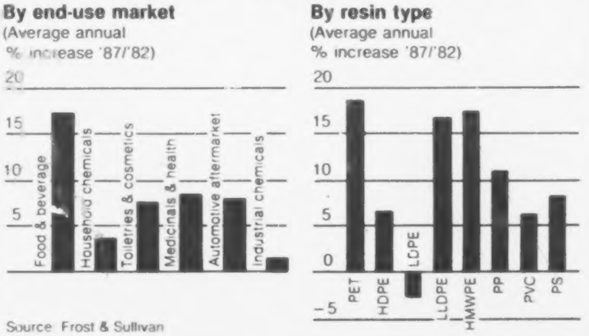
While food and beverages will account for the lion's share of the increase, some fair-sized demand gains are also projected for household chemicals, industrial chemicals, toiletries, medicines, and auto aftermarket.

Zeroing in on the food and beverage market, the biggest advances will be in alcoholic beverages (beer, wine and liquors) and soft drinks where average annual plastic container gains of 53% and 21%, respectively, are projected. Milk, a more mature market, is expected to show only 5.5% annual increases.

As for the type of resin used, high-density polyethylene or HDPE (now the dominant material with 69% of the market) will gradually lose share to polyethylene terephthalate (PET) where annual gains of 18% a year are seen—as more and more beverage makers turn to PET bottles. But even by 1987 HDPE's market share should outpace PET's by a wide margin—60% to 30%.

Other projected annual growth rates for resins in the blowmolding packaging area include polyvinyl chloride (6%—mostly for chemicals and toiletries), polypropylene (11%—mostly for medicines), and low and linear low-density polyethylene (4%—mostly for squeeze bottles).

Plastic bottles: more big growth ahead



Source: Frost & Sullivan

PW PREDICTS

Lead

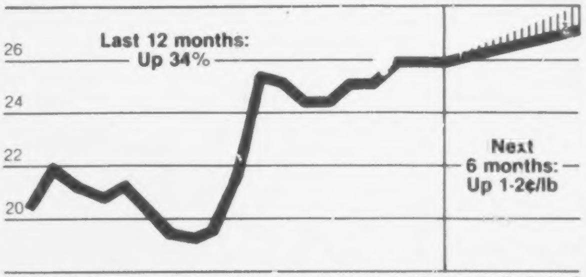
CURRENT SITUATION: Prices have temporarily stabilized in the 25¢/lb.-plus range—after rising a significant 34% over the past year (see chart below). **But buyers now have another concern: work stoppages.** St Joe's five Missouri mines, which account for 40% of all U.S. output, have been on strike. Ditto, Australia's Broken Hill Associated Smelters' big 250,000 metric tons per year facility. On a more optimistic note, Asarco has just reopened its shuttered Glover smelter.

DEMAND: Don't look for anything spectacular. True, totals will be better than in 1983 when U.S. usage dropped some 4% (to 1.14 million short tons)—primarily because of the lead-in-gasoline phaseout. But if all goes well a 5% increase into the 1.2 million ton range looks feasible for the year as a whole.

SUPPLY: There's more than ample capacity available—both here and abroad. But strikes could well make for some temporary tightness. Also refinery stocks have dropped considerably over the past few quarters. Secondary lead potential does offer some reassurance. Thus the 600,000 tons of domestic production currently projected for 1984 (nearly half of all projected 1984 demand) **would still leave these plants operating at only 60% of their capacities. Nor is the scrap input for these secondary facilities likely to pose any problems.**

PRICE OUTLOOK: Trends over the next few months will depend on mine and smelter labor developments. If work stoppages don't interfere, the normal seasonal slowdown could **drop prices a cent or two by June or July.** Even so, that would still leave tags well above the 21¢/lb. average of last year. **As for late 1984—a modest uptrend can't be ruled out**—with quotes moving up into the 28-30¢/lb. range—especially if forecasts calling for a significant increase in battery demand materialize.

Lead (producer price)
(Cents per pound)



Steel

Improving demand continues to push prices up closer to list levels. Midwestern distributors, for example, see sheet moving up another $20-$40/ton by July—with average discounts at that time whittled down to about $20/ton. In other product lines there's talk of (1) the complete elimination of discounts in oil country tubular goods by summer, and (2) a further $25/ton boost in h-r bars. Further increases for many products seem likely by fall.

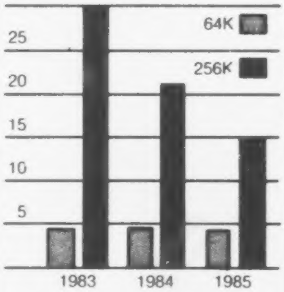
Copper

Easiness persists. On the other hand, U.S. demand continues to improve—led by water tube where sales have jumped 25% over the past six months. Japanese and European ordering is up, too—and exchange stocks continue to drift lower. All this suggests a resumption of the early spring uptrend—with quotes edging into the 85¢/lb. range by late in the year. But any bigger hike seems remote. Reason: Global production continues to creep up.

Electronic parts

Prices for 64K Dynamic RAMs seem to be leveling off in the $4.70-$4.80 range. But look for some substantial decreases in the new 256K Dynamic RAMs just now getting into volume production. Average price this year could drop close to $21 (versus $30 last year)—with a further 25-30% fall-off anticipated for 1985. On the other hand, multi-layered PC boards should continue to edge up on strong demand—with close to 10% increases seen for both this year and 1985.

Electronic components
Dynamic RAMs ($)



Petrochemicals

A mixed picture here. The second quarter 30¾¢/lb. butadiene quote has been whittled down to near 30¢/lb. Imported material is available for as low as 27½¢/lb. Meantime, only about ½-1¢/lb. of a recent ethylene boost has held—with market quotes in the 20¢/lb. range. As for propylene, producers are getting about 1¢/lb. more—with the chemical grade going for 19-19½¢/lb. More price boosts are expected for all three chemicals after midyear.

Aluminum

Markets are somewhat soft—with merchant ingot now fetching less than 70¢/lb.—some 3-4¢/lb. under month-earlier levels. And in the fabricated sector, a 5-7% boost in common alloy products has been postponed. Demand, too, isn't as robust as it was a few months ago. And on the supply side, an increase in output has allayed fears of tight supplies. Nevertheless, the overall picture is still basically bullish—with U.S. demand expected to increase 10% this year. That should be enough to edge ingot close to 80¢/lb. by late fall or early winter.

Sulphuric acid

Figure on paying about $5/ton more over the next few months. Reason: improving demand (which has managed to bring industry operating rates up into the respectable 75% range)—plus a pass-through of a recent $7.50/ton increase in basic sulphur (to $140/ton, FOB Tampa). Recovered sulphur tags are also rising. Another factor in all the firming has been a sharp drop-off in inventories—with Frasch and recovered sulphur stockpiles down 22% and 30%.

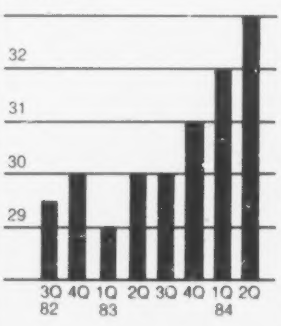
Zinc

Bullishness is still the order of the day—with the booming auto market pushing U.S. chewup as much as 10% higher this year. In addition, the erosion in zinc use per car seems to have bottomed out. Also on the positive side are (1) good Chinese demand—perhaps as much as 200,000 metric tons this year, (2) falling domestic stocks—now under a one-month supply, and (3) improving capital construction which should stimulate demand for hot-dipped products. But any price increase above current levels is likely to be small—with little more than a 55-57¢/lb. range anticipated by the early fourth quarter.

Styrene

The monomer is firming on a broad front—prodded by (1) strong demand from polystyrene and polyester resins, (2) a step-up in export sales, and (3) temporary plant shutdowns. This combination of factors has pushed styrene up to 33¢/lb. on a transaction basis—some ½-2¢/lb. above recent levels. This, in turn, could put new upward pressure on polystyrene tags which just recently went up another 2¢/lb.—a move which has brought lists for the general purpose grade up into the 48¢/lb. range.

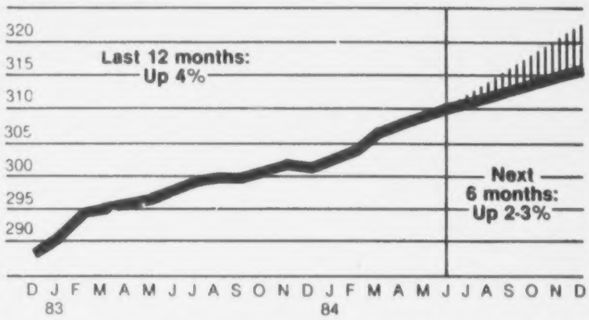
Styrene
(cents/lb)



Airline tickets

Press travel agents for rebates. A new survey, for

Construction materials
(Index 1967 = 100)



CURRENT SITUATION: Upward price pressures have been rather uneven in recent months. On the upper end of the scale is gypsum where tags now run close to 25% above a year ago. And copper water tube—with a 10% boost since the beginning of the year—isn't that far behind. Some steel and asphalt products have also moved up significantly. On the other hand, **cement and lumber have been doing little more than marking time.**

DEMAND: Products going into the housing market are likely to fare best—based on projections for about a 10-11% increase in real residential contract construction this year. Not so in 1985, however, when non-residential construction will lead the parade. Cement makers are talking in terms of a 78-79 million ton year—up as much as 10% from 1983. Smaller gains in the 6-8% range are anticipated for flat glass, brick, concrete products, and plumbing supplies. As for lumber, a 5% gain to 33.1 billion board feet is seen—with a similar boost bringing plywood up into the 19-20 billion square foot range.

SUPPLY: Gypsum seems to be the only really tight product at this time—as plants operate at near 95% of their rated capacity. True, operating rates in cement are also rising fast—but in this latter area there's still plenty of the material around. But cement could cause problems in 1985 and 1986—for the industry's capacity is only 88 million tons.

PRICE OUTLOOK: The gentle 1983-early 1984 uptrend is likely to continue. As such, look for maybe another 2-3% being added onto overall averages over the next six months—with similar gains continuing into early '85. **Cement is probably the prime candidate for a bigger-than-average boost.** Other areas slated for fair-sized advances would have to include building paper, roofing and paving materials, and flat glass. But any boosts in lumber and plywood will be quite limited.

PW PREDICTS

Calculators

Odds are you'll be buying a lot more calculators in the months and years immediately ahead—many of them especially designed to meet specific business needs.

So say officials at Aurora Impex Corporation—one of the world's largest makers of calculators. All told, the firm is projecting a fairly brisk 4.8% demand increase for 1984 (versus last year's near level performance)—with the long-term growth rate put in the almost-as-large 3.6% range.

And even that doesn't tell the whole story—with the more sophisticated programmable types likely to sport a big 15% advance over the current year. Gains in this category through 1987 could be almost as high—probably something on the order of 8% a year.

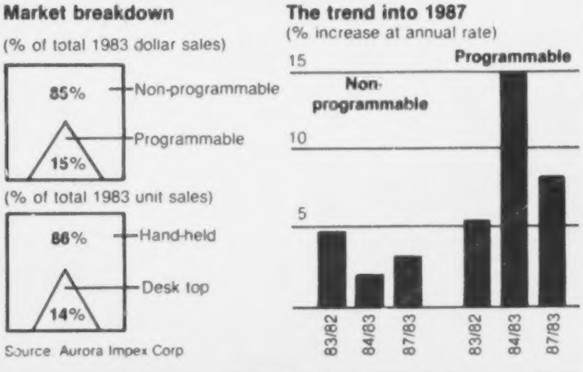
Steadily falling prices and more versatile sets are expected to be the driving force behind the overall calculator uptrend.

On the latter score, users are now getting an ever-widening selection to choose from—including currency exchange passport calculators, checkbook calculators with multiple memory capacity, credit card ultra-thin calculators, scientific calculators, budget planner calculators for women shoppers—and solar types that no longer need light to operate.

More imaginative distribution should also aid the demand uptrend. Thus more and more stores are moving toward gondola self-standing display units—to allow "hands on" experimentation and instruction without the need of a salesperson while at the same time reducing theft potential.

As in the past, however, hand-held sets will continue to capture the largest share of the market. Last year, for example, the small convenient machines accounted for 86% of all units sold—with the larger desk-top types making up the remaining 14%.

How calculator sales shape up



Source Aurora Impex Corp

example, suggests that there is a pretty good chance of getting them—especially where transportation budgets run upwards of $500,000 a year. In any event, almost 40% of queried U.S. companies admit to receiving such rebates (with the average kickback put at near 3.1%)—either in the form of outright discounts or as a percentage of the agent's income from such bookings. Outright discounts from the airlines themselves are also sometimes available. One firm, in return for volume guarantees, for example, is said to be getting discounts running 30% under list price.

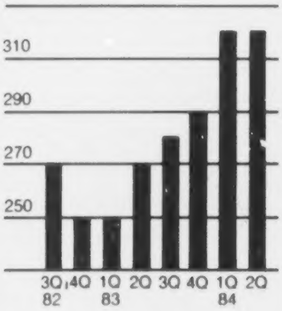
Computers

Small discounts are becoming available on IBM personal computer models— for those willing to take the time to shop around. A grey market has also developed—as overstocked sellers begin dumping sets at lower prices to unauthorized dealers. Small home computers also seem to be heading lower. Trade reports, for example, suggest that the recently reduced Apple IIe will be discounted to as low as $700.

Paper and paperboard

Brace for more hikes in linerboard—with perhaps another $30/ton added onto quotes by fall—bringing the going price up into the $350/ton range. Behind the expected boost: booming demand which should keep 1984 operating rates near the 97% level—some five full percentage points above 1983 levels. If the boost materializes, similar increases in corrugated boxes won't be far off. Meantime, in the fine paper sector, 1984 coated price averages look to run 10% above year-ago levels—with uncoated grades moving up by an even bigger 16%.

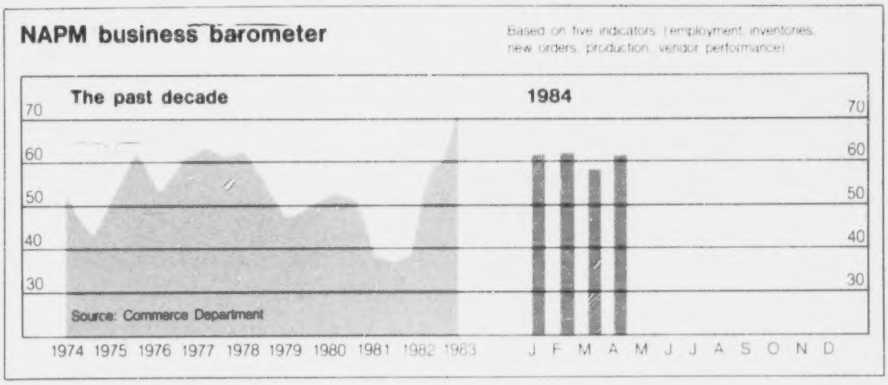
Linerboard
(dollars/ton)



Coal

Modest price boosts could be in the making as users begin hedging against a possible October 1 mine strike. Best bet: A 5% increase by fall—enough to bring current spot quotes for low-sulphur steam coal into the $24-$28/ton range. Overall demand, too, looks fairly bullish—with consumption (including exports) likely to hit 873 million tons this year—up 7% from 1983 level. Long-term gains, however, are put in the more modest 3% annual rate range. ***PW***

BUSINESS DATATRAK



NAPM business barometer

Based on five indicators (employment, inventories, new orders, production, vendor performance)

KEY ECONOMIC TRENDS

Solid gains but some cooling coming

The current (second) quarter may not turn out quite as robust as the first three months of the year when GNP advanced at a better-than-8% rate in real terms.

But by the same token, things still look pretty rosy. Indeed, preliminary indications suggest that the April-June period will again post a solid gain—with a real GNP advance of 4-5% almost certain.

Lest there by any doubt on this score, take a look at some of the nation's key business barometers.

The NAPM business barometer, for example, continues to run well above the neutral "50" mark that signals the dividing line between probable gain and loss. In fact, the latest reading of 61.4 is actually a bit higher than the 58.3 level of just one month earlier.

Additional strength should also be coming from still thin inventories. With stock/sales ratios remaining at or near all-time lows, any increase in demand over the next few months will have to be met by new production rather than inventory drawdown.

Also on the bullish side is the still brisk pace of incoming factory order—rising at a 1-2% clip for better than nine straight months now (top chart right). To be sure, a lot of this reflects an increase in defense bookings. But this counts just as much as nondefense orders—at least as far as overall impact on real GNP.

Included in the overall rise this time around is another increase in machine tool orders. If nothing else, the latest 3% monthly advance offers pretty strong evidence that the heretoforce sluggish capital goods sector has turned the corner—and will henceforce also be contributing to overall economic gains.

On a somewhat less bullish note, construction contract awards (a harbinger of future building activity) seem to be leveling off.

But luckily there's a countervailing force: strong nonresidential building—particularly in the office building, warehouse, and public works sectors.

The rising cost of money may also be a reason for a similar plateauing out in retail sales and consumer buying plans. On the latter score, the Conference Board's index of these purchasing intentions has been edging lower for two consecutive months now.

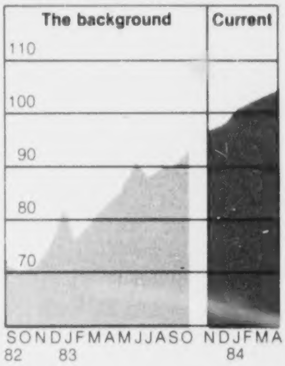
But note that the drop has been quite modest when compared to the extremely large rise through all of last year. In any event, the latest reading is still a hefty 25% above year-earlier levels.

To sum up then, the business curve still seems to be heading up. But the rate of advance may be somewhat more restrained. Not only does this reflect

Leading indicators

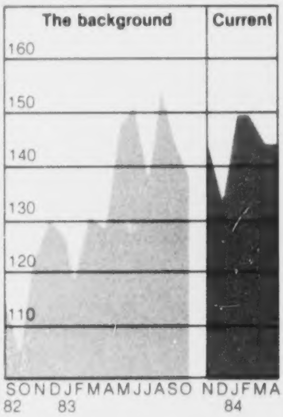
1. Durable orders

(Millions $, seas. adj.)



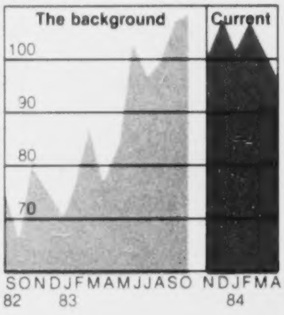
2. Contract awards

(Index: 1977 = 100)



3. Consumer buying plans

(Index: 1969 – 70 = 100)



recent rises in the cost of money, but also the fact that any economic upturn tends to lose some of its steam after close to a year and a half of steady gains.

In short, some deceleration seems inevitable. But it's important to keep in mind that deceleration and decline are two different things. Right now, for example, all signs point to about 3% real GNP gains, give or take a half a percentage point, for both the third and fourth quarters.

But this kind of cooling is all to the good—for it should help prolong the current recovery.

Executive optimism runs high

There may be talk of an economic pause. But most top business executives just aren't buying it. Thus—

- Dun & Bradstreet in its new second quarter 1984 survey of more than 1,400 business leaders finds that corporate optimism is at its highest level in five years. More to the point—some 83% of the respondents expect sales gains vis a vis a year ago. Weigh this against the small 4% who look for declines and it makes for a D&B Sales Optimism Index of 70 (83% up minus 4% down).
- The Conference Board which queries an even larger number of chief executives comes with an equally impressive finding—a Confidence Index of 70 (on a scale of 0-100)—pretty high by almost any standard.

True, this isn't quite as high as the previous two quarters. But this is nothing to be concerned about, says Lora S. Collins, director of Business Conditions Analysis at the Board. As she explains it, "As an economy matures, a decline is expected in the number of respondents reporting that conditions have improved or are expected to improve."

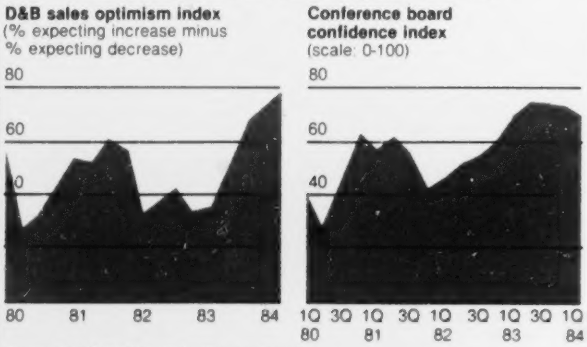
To bolster her appraisal of more business gains ahead, she cites the fact that some 50% of the surveyed executives expect employment to increase in their industries in 1984—the highest such percentage in the survey's history.

Findings of the D&B survey are equally upbeat. For example, some 84% expect new order increases in second quarter 1984 compared with a year earlier—double the 42% figure of just six months earlier.

Intentions to beef up inventories also indicate basic business confidence—with some 50% of the respondents telling D&B survey takers that they expect second quarter stocks to top year-ago levels—again twice the response of just six months earlier.

About the only cause of concern are D&B findings suggesting that price increases may be accelerating. Some 54%, for example, currently expect quotes to top year-earlier levels. Six months ago, the comparable figure was only 38%.

Two views from the corporate suite



Source: Dun & Bradstreet, Conference Board

Word processing

It's becoming increasingly hard to find a firm that doesn't use some kind of word processing equipment these days.

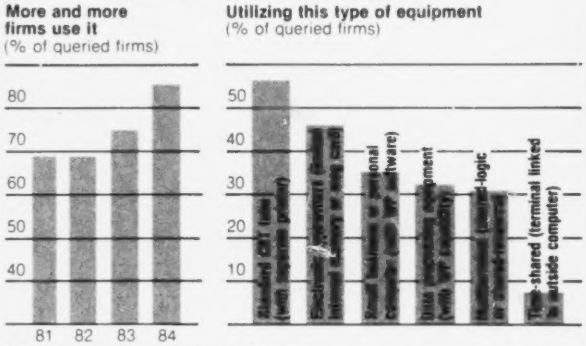
This year, for example, some 86% of the nearly 400 firms queried by the Administrative Management Society say that they utilize such equipment—up from 75% last year and only 69% in both 1981 and 1982. Add another 9% considering this approach—and the figure could be in the 95% range before too long.

More intensive use is also indicated. Thus the majority of respondents (54% to be exact) say that they plan to add additional word processing terminals or equipment within the next year.

Then, too, a growing number of firms note that they're doing more and more of their typing on WP equipment. Specifically 38% use, or are considering this approach, for over half of their typing (versus only 27% who did so last year).

Increasing productivity, of course, is the major factor behind the surge. Bottom line: Almost three-fourths of the respondents say that they have quantified an increase in efficiency—43% of these firms putting the advance in the 25-50% category, with an additional 21% indicating productivity increases in the 50-75% range.

Word-processing at a glance



Source: Administrative Management Society

CURRENT PRICES

News good as advances are modest

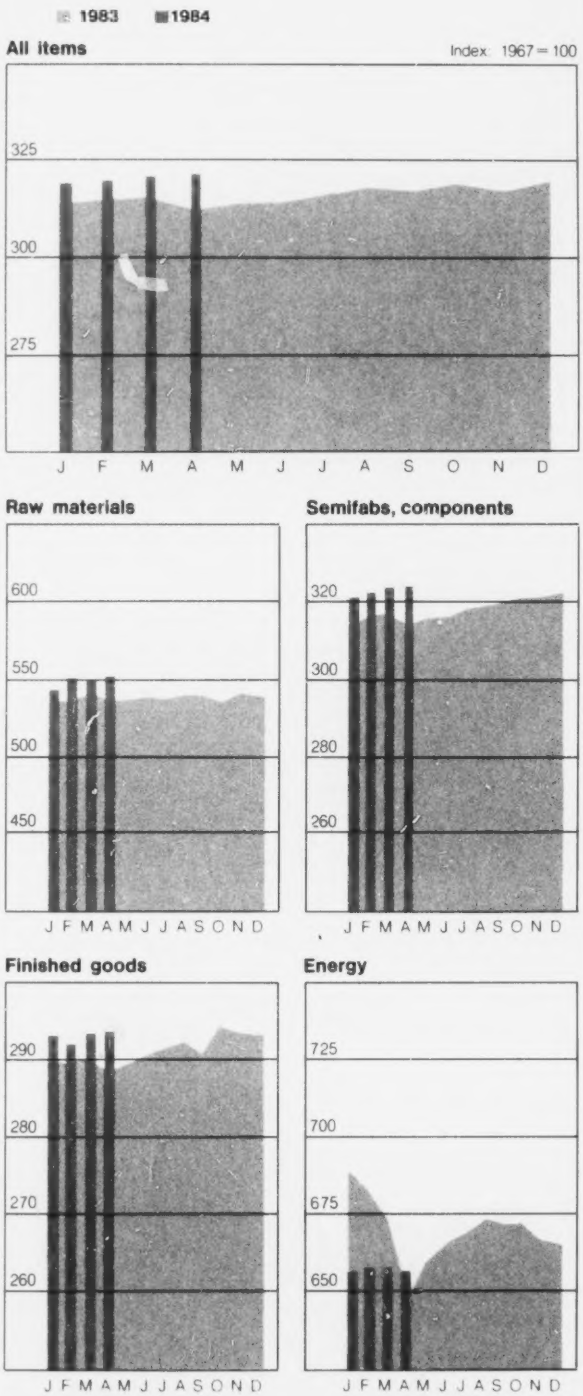
More good news on the industrial price front. Producer price averages moved up only 1.5% over the first four months of the year—or roughly 4.5% at annual rate—a remarkable showing in view of the strong demand gains over this same period.

A good part of the credit has to go to energy—where fractional declines have recently been reported. During the latest available month, for example, slippage was noted in diesel fuels, residual oil, commercial jet fuel, kerosene heating oil, and coal. These were more than enough to offset increases in electric power, gasoline,

This month's breakdown

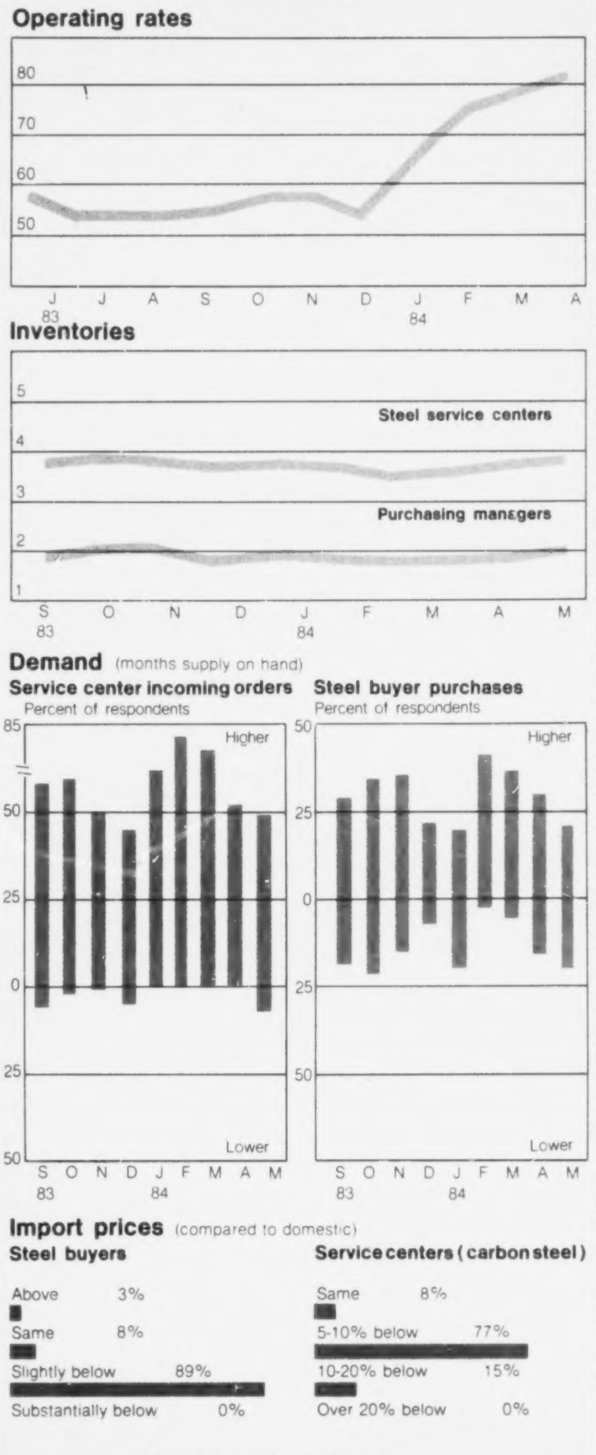
	Latest level (Apr)	% change from: Month ago	Year ago
Bearings	338.8	0.7	2.3
Bolts, nuts, etc	274.4	0.7	2.3
Chemicals, inorganic	290.8	0.0	−2.7
Chemicals, organic	371.4	−0.4	3.9
Concrete products	308.8	0.8	2.6
Corrugated cartons	263.7	1.4	10.1
Cutting tools, small	280.1	0.1	0.3
Electric lamps (bulbs)	346.8	1.6	11.8
Electronic components	190.6	−0.1	5.5
Fans and blowers	341.6	0.0	1.5
Foundry and forge products	359.6	0.8	2.1
Fuel oil (residual)	1110.3	−0.5	9.3
Furniture, commercial	297.5	0.4	3.9
Gasoline	572.6	0.7	1.5
Glass, flat	229.5	−0.1	−0.1
Glass containers	358.4	1.9	1.4
Gypsum products	353.1	4.0	29.9
Hand tools	356.0	0.3	1.9
Hand tools, power driven	223.0	−0.6	0.3
Industrial furnaces	371.7	0.3	2.8
Integrating and measuring instruments	229.6	0.3	4.8
Internal combustion engines	343.1	0.0	0.3
Lubricating oil	797.9	0.0	1.2
Lumber millwork	307.7	−0.6	1.6
Material handling equipment	287.6	0.1	1.0
Metal containers	345.5	0.0	4.1
Metal mill shapes (nonferrous)	328.2	0.8	7.4
Metalworking machines	332.4	0.7	1.9
Metal tanks	305.6	0.1	−0.2
Motors and generators	339.3	0.4	4.4
Motor trucks	282.4	0.4	4.6
Office and store equipment	154.8	0.1	0.2
Paperboard	275.4	0.7	11.0
Paper boxes and shipping containers	262.4	1.4	6.5
Paper office supplies	244.6	4.7	7.8
Paint	267.3	−0.1	1.0
Plastic resins	308.6	0.7	8.1
Precision measuring tools	253.0	0.0	3.2
Pumps and compressors	349.3	0.5	0.3
Refractories	362.9	0.2	7.3
Rubber belts and belting	334.5	0.5	2.7
Scales and balances	231.2	0.3	2.1
Steel products	360.9	0.1	4.0
Switchgear	271.7	0.5	−0.4
Textiles, synthetic fibers	160.6	−0.4	4.4
Textiles, gray fabrics	153.0	0.1	4.9
Tires and tubes	243.2	0.4	−1.3
Transformers and power regulators	226.4	0.2	0.4
Welding equipment	279.0	0.8	−0.1
Wire and cable	204.6	1.4	0.0

Industrial prices



Source: Bureau of Labor Statistics

Steel



Source: Steel Service Center Institute, NAPM Steel Buyers Committee

and natural gas.

But perhaps even more remarkable has been the small amount of increase in both the crude and semifinished categories—sectors normally quite sensitive to the strong buying patterns of recent months.

Metals, in particular, have been relatively well behaved. Indeed, averages remain pretty much unchanged from late winter levels—except for steel where smaller discounts have pushed transaction prices up in many areas.

There's little to complain about in component parts either. But there are some exceptions in this case—with some fair-sized boosts recently posted on fasteners, bearings, rubber hose, motors and generators, and pumps and compressors.

Machinery averages, meantime, are showing only fractional advances. Ditto, most industrial chemicals and building materials. Indeed, one product in the latter category (softwood lumber) has actually edged a bit lower in recent weeks.

That's not to say, of course, that everything is coming up roses. High (95%-plus) operating rates are pushing up paper products on a broad front. Some of the increases relative to 12-month earlier readings: paperboard (11%), corrugated boxes (10.1%), and paper office supplies (7.8%).

In short there are some price problems. But by and large, increases have been relatively moderate—with the typical purchase mix probably not up by more than 5% compared with a year ago.

STEEL SCENE

Less robust but still growing

Steel buying is still heading up. But the increases over the next few months may not be quite as robust as those noted over the past few months.

Both buyers (responding to a new NAPM steel survey) and distributors (responding to the latest Steel Service Center Institute query) are pretty much agreed on this scene. Thus the 21% of the metal buyers who anticipated increased steel receipts over the next three months are exactly balanced off by a similar 21% who think they may cut back a bit.

True, more steel service centers see increased incoming orders than decreased orders. But the fact that 12% now are talking in terms of decreases is significant—for this is the first time since last December that even one service center sees a near-term decline.

Observes SSCI president Andrew Sharkey, "All our major end user markets look extremely healthy."

On the latter score, he notes that factory utilization, now above the 80% mark, is nearing the point where investments in capital equipment may soon be followed by new brick and mortar. In fact, the latest capital spending projections call for a 12% increase this year.

...continued

"If there's any troublesome note in recent surveys," adds Mr. Sharkey, "it would be the increasing number of reported shortages." The products in short supply continue to be primarily sheet and aluminum products—though there are reports of scattered problems in plate and stainless.

Sporadic tightness (mostly in the form of extended lead times which in some cases have doubled since last year) is also confirmed by buyers.

This somewhat tighter supply—though no one seems even remotely on the verge of pushing the panic button—may be partially responsible for a slow edging up in inventory levels.

But as suggested here, the above buying in no way suggests an unwanted buildup. Best bet for customer inventory increases this year: only about 3.5 million tons—not overly excessive in terms of consumption—and certainly in no way a threat to near-term steel order books.

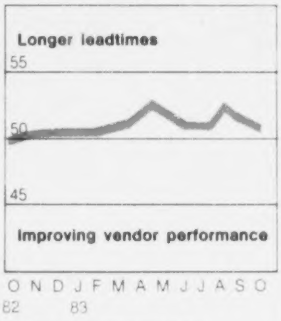
Buyers, in addition to reappraising their overall inventory strategies, are also continuing to push for substantial tonnages of foreign steel. Some 22%, for example, say that they intend to be more dependent on overseas metal over the next six months—more than four times the 5% who feel they might be somewhat less dependent.

Price, of course, seems to be the major reason for this. Thus, nearly 9 out of 10 surveyed purchasing executives say foreign steel is priced under comparable domestic levels.

Monthly procurement status report

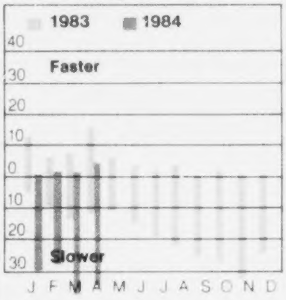
Leadtime index

A 'diffusion' index based on 158 key commodities. Above '50' indicates a tendency for leadtimes to stretch out. Below '50' suggests improving vendor performance.

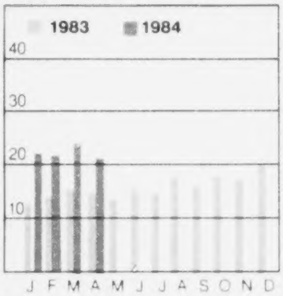


Delivery performance

Percent reporting deliveries

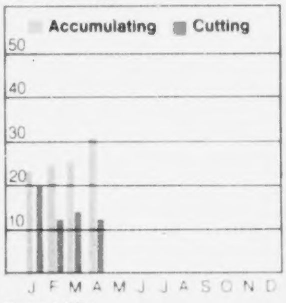


Forward commitments



Inventory strategy

Percent of respondents



Source: NAPM

PROCUREMENT STATUS

Stretch outs are livable

Leadtimes continue to stretch out. But increases are not quite as large as those noted during the first few months of the year.

Thus *Purchasing World's* exclusive leadtime index registers on "51"—just one point above the neutral 50 mark—suggesting that things may soon be stabilizing as the economy moves into slower, more sustainable growth.

Also indicative of a more livable situation is the fact that the increase in the number of purchasing executives reporting slower deliveries has begun to slow down. Specifically, the 36% who now report slower deliveries is three percentage points under the level of the previous month. Also 5% now note faster deliveries—versus 2% a month ago.

The somewhat better overall PM feeling is summed up by one Midwestern buyer: "If the economy grows at a 3% pace in the second half, things should not get any worse because new capacity is coming on stream at just this same rate."

One thing for sure, few seem worried to the point that they're actually changing their procurement policies. Indeed, the 21% who are now committing for production materials 90 days or more in advance is under the 24% of just one month earlier.

To be sure, a lot more are adding to inventories these days—31% to be exact versus only 13% who are currently paring stocks. But this probably reflects the need to sustain higher production schedules rather than any hedge buying against possible future tightness.

Also reassuring in this respect is the fact that buyers responding to the latest NAPM Business Survey Committee query list only two items in really tight supply: (1) integrated circuits and a few other electronic components, (2) hydrogen peroxide. This is nothing like the long list of the late '70s when the economy was last in a strong boom phase.

Leadtimes and availability

Chicago: Offsetting changes here. Out to new higher weekly waits are common alloy aluminum plate (14), brass rods (5-6), copper and brass tube (12-14), batteries (14-26), capacitors (14-20), and resistors (8-20). But in a bit are mill supplies (2-3), film laminations (12-16), h-r steel sheet (4-6), steel plate (3-4).

Cleveland: Waits are beginning to stabilize—with these typical weekly leads prevailing: waterproof paper (5-6), plastic shrink film (3), strapping (2-3), multiwall paper (8-10), alloying material (on demand), corrugated boxes (3), folding boxes (4), steel canisters (6), polyethylene and PVC (3-4), cold finished aluminum (12-14).

Los Angeles: Somewhat lower weekly leads prevail for brass castings (6-8), fasteners (6-8), custom seals and gaskets (4-6), electronic hardware (4), wire and cable (6), and paints (4). But moving out somewhat are connectors (30), electric equipment (26-30), and passive electronic components (26).

BUSINESS DATATRAK

Houston: High pressure heat exchangers now take a longer 6-14 months. Forgings are out a bit, too (to 5-7 weeks). But control valves take somewhat less (only 2-6 months). Unchanged (in weeks) are mill steel (4), MRO supplies (3), air compressors (4-6), valves and fittings (0-1), electric and electronic components (8).

Philadelphia: Extensions predominate—with these new higher weekly leads: Standard fasteners (2-3), special fasteners (8-10), bearings (18-26), printed circuit boards (14-18), carbon steel round coils (8-10), aluminum for sheet and extrusions (6-8). But plastic sheet is in (to 4). Ditto, stainless round coil (10-12).

Pittsburgh: Some extrusions noted in both magnesium and manganese—both now 4 weeks because of strong demand. Most other alloying materials remain unchanged. Ditto, steel strapping (2-3), polyethylene (5), PVC (6), maintenance paint (5), plastic bags (3-4), corrugated boxes (3-4), and laminated papers (6-9).

Leadtimes (in weeks)

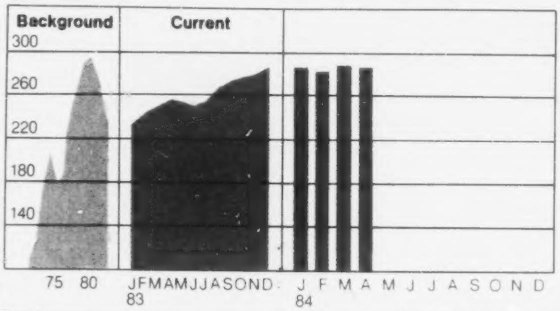
	Now	Month ago	Six months ago
STEEL			
Sheet (Phil)	9	9	7
C-R Sheet (Chgo)	8	8	10
Plate (Phil)	10	10	6
Plate (Chgo)	3½	6	3
Reinforced (Hous)	6	6	6
H-R Bars (Phil)	7	7	4½
H-R Bars (Chgo)	3	3	2½
Cold-Drawn Bars (Phil)	7	7	4½
Galvanized (LA)	16	16	11
Galvanized (Chgo)	8	9	7
Structurals (Chgo)	3½	3½	2½
Structurals (Hous)	17	17	15
Tubing (Phil)	7	7	6
Grey Iron Castings (LA)	9	9	6½
Steel Castings (Hous)	11½	11½	11½
Forgings (Hous)	6	5	7
Pipe, Carbon (Hous)	13	13	13
ELECTRIC & ELECTRONIC			
Cables (Chgo)	8½	8½	8½
Capacitors (Chgo)	17	16	14
Circuit Breakers (Chgo)	6	6	6
Electromech. Devices (LA)	13	13	9
ICs (Linear) (Phil)	20	20	11
Motors (Phil)	15	21	21
Motors, 1000 hp & Up (Hous)	39	39	39
Printed Circuit Boards (Chgo)	17	17	10½
Relays (Chgo)	15	15	15
Resistors (Chgo)	14	10	10
Resistors, Wirebound (Phil)	10	10	9
Transformers (Chgo)	10	10	10
LUMBER			
Hardwood (Pgh)	3	3	3
Hardwood (Clev)	3½	3½	3½
Plywood (Chgo)	1½	1½	2
Plywood (Phil)	1½	1½	1½
Softwood (Clev)	3	3	3
Softwood (Phil)	1/5	1/5	1/5
Softwood (Pgh)	3	3	3
Particleboard (Phil)	2½	2½	2½
CHEMICALS-PLASTICS			
Adhesives (LA)	½	½	½
Napthalene (Chgo)	2	2	2
Paint (LA)	5	5	4
Paint, Coil Coating (Pgh)	4	4	4
Paint, Maint. (Cleve)	3	3	2
Polyester Resin (LA)	2	2	2
Polyethylene Resin (Cleve)	3	3	2½
Polyethylene Resin (Pgh)	4	4	4
PVC Resin (Chgo)	3	2	2½
PVC Resin (Pgh)	6	6	4
Titanium Dioxide (LA)	1	1	1
PACKAGING			
Bags, Kraft (Pgh)	5	5	5
Bags, Multiwall (Clev)	9	9	9
Bags, Multiwall (Pgh)	6	6	6
Cartons, Corrugated (Cleve)	3	3	3
Cartons, Corrugated (Hous)	3	3	3
Cartons, Folding (Phil)	6½	6½	6½
Cartons, Folding (Pgh)	3½	3½	3½
Cellophane Wrap (Phil)	5	5	5
Plastic Bags (Pgh)	3½	3½	3½
Plastic Pkg. (Pgh)	3	3	3
Shrink Film (Chgo)	4	4	4
Shrink Film (Clev)	3	3	3
Drums, Fiber (Pgh)	1	1	1
Drums, Steel, Std. (Pgh)	1	1	1
Wood Pallets (Chgo)	2½	2½	2½
Wirebound Boxes (Pgh)	4½	4½	4½
Strapping (Clev)	2½	2½	2½
Strapping (Pgh)	3	3	3
PAPER			
Fiberboard (Clev)	3½	3½	3½
Glassine (Clev)	4½	4½	4½
Glassine (Pgh)	5½	5½	5½
Groundwood (Clev)	4½	4½	4½
Groundwood (Pgh)	7	7	7
Kraft (Clev)	1	1	1
Kraft, Bleached (Clev)	1	1	1
Kraft, Bleached (Pgh)	5	5	5
Kraft, Natural MFNS (Clev)	1	1	1
Laminated (Clev)	8	8	8
Tissue (Pgh)	5½	5½	5½
NON-FERROUS			
Aluminum Coil (Chgo)	15	15	11
Aluminum Plate (Chgo)	14	12	9
Aluminum Sheet (LA)	4½	4½	4½
Aluminum Sheet (Chgo)	15	15	14
Brass Castings (LA)	7	13	17
Brass Rods (Chgo)	5½	4½	3½
Brass Sheet (Chgo)	17	17	9
Brass Tube (Chgo)	9	9	9
Copper Fittings (LA)	3½	3½	5
Copper Mill Prod. (Pgh)	6	6	6
Copper Tube (LA)	5½	5½	5
Copper Tube (Phil)	6	6	6
Lead (Pgh)	2	2	2
Magnesium (Pgh)	4	3	2
Manganese (Clev)	1	1	1
Nickel (Clev)	4	2	2
Nickel (Pgh)	2	2	2
Silicon (Clev)	1	1	1
Tin (Pgh)	3	3	3
Wire, Specialty (LA)	8	8	5
Zinc (Pgh)	6	6	2
MISCELLANEOUS			
Bearings, Domestic (Phil)	22	12	12
Bearings, Foreign (Phil)	26	26	26
Boilers & Furnaces (Hous)	35	35	35
Compressors, Centrifugal (Hous)	48	48	52
Compressors, Reciproc. (Hous)	39	39	39
Fasteners (Chgo)	1½	1½	½
Fasteners (LA)	7	9	4
Fasteners, Std. (Phil)	2½	2	2
Heat Exchangers, Carbon-alloy Steel (Hous)	20	20	20
Heat Exchangers, Hi-pressure (Hous)	43	21	21
Insulation Mat'l. (LA)	7	7	7
Machined Parts (Hous)	9	9	9
Pipes & Valves (Chgo)	2	2	1
Pumps (Hous)	35	35	39
Pumps (LA)	9	9	9
Rubber, Synthetic (LA)	2	2	2
Rubber Hose (LA)	4	4	4
Tungsten Carbide Parts (Hous)	15	15	15
Valves, Cast Steel (Hous)	17	6½	8
Welding Supplies (Hous)	5	5	5

BUSINESS DATATRAK

Raw material price barometer

Latest month	288.6
Month before	289.2
Year ago	253.2

Index: 1967 = 100



Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	347.00	347.00	347.00
Steel, structural shapes, Pitts., cwt.	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt.	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt.	24.40	24.40	24.40
Steel, bars, dlvd. Phila., cwt., merchant quality	17.50	17.50	17.50
Steel, bars, Pitts., cwt.	17.50	17.50	17.50
Steel, bars, C.R., Pitts., cwt.	26.00	26.00	26.00
Steel, plates, Pitts., cwt.	23.25	23.25	25.75
Steel, plates, H.R., Pitts., cwt.	23.25	23.25	25.75
Steel, sheets, C.R., Detroit, cwt.	27.10	27.10	26.15
Steel, strip, C.R., Chi., cwt.	35.30	35.30	29.05
Steel, basic wire, Pitts., cwt.	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	0.665	0.698	0.650
Antimony, in alloy, lb.	2.00	2.00	2.00
Beryllium-copper, cost ingot, lb.	5.20	5.20	4.95
Brass, red, 85%, [sheet], lb.	1.26	1.30	1.30
Brass, yellow, [sheet], lb.	1.21	1.25	1.24
Cadmium, ton lots, lb.	2.25	1.50	1.00
Copper, electrolytic, wire bars, refd., lb.	0.70	0.75	0.82
Copper sheet, over 24 in., lb.	1.35	1.39	1.39
Lead, common, N.Y., lb.	0.25	0.26	0.21
Magnesium, pig ingot, [99.8%], lb.	1.43	1.43	1.34
Mercury, 20 fl. lots, N.Y., fl.	327.00	322.00	325.00
Molybdenum Climax Oxide/bags, lb.	4.65	4.65	4.65
Nickel, electrolytic, producer, lb.	3.20	3.20	3.20
Platinum, producer, oz.	475.00	475.00	475.00
Silver, N.Y., oz.	8.73	9.23	12.40
Tin, Straights, N.Y., lb.	6.37	6.36	6.84
Zinc, Prime West, East St. Louis, lb.	0.52	0.53	0.40
Zinc, die casting alloy, No. 3, lb.	0.595	0.595	0.465
PAPER			
Uncoated book #3 offset, ton	810.00	810.00	680.00
Watermarked bond, ton	985.00	985.00	845.00
Gummed sealing tape, carton	15.45	15.45	15.50
Boxboard, mach. clay ctd. recycled sheets 80 bright, .016, ton	475.00	475.00	475.00
Wrapping paper, std. distributor cost, kraft, basis wt. 50 lb., roll	28.00	28.00	28.00
Kraft linerboard, 42 lb., unbleached, ton	320.00	320.00	270.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd.	0.297	0.306	0.241
Cotton drill, 1.85, 59", 68x49, N.Y., yd.	1.04	1.04	0.97
Cotton middling, 1", N.Y., lb.	0.799	0.763	0.659
Printcloth, 48", 80x80, N.Y., spot, yd.	0.80	0.82	0.58
Army duck, 37", 13 oz., yd.	1.90	1.79	1.60
Blended printcloth, 64", 78x54, yd.	0.750	0.760	0.670
20s combed yarns	2.16	2.16	1.68
Wool tops, N.Y., lb.	3.60	3.60	3.60

	Latest price	Previous month	Year ago
CHEMICALS			
Acrylonitrile, tanks, lb.	0.455	0.455	0.430
Ammonia, anhydrous, fertilizer, wholesale, tanks, ton	210.00	210.00	150.00
Benzene, petroleum, tanks, Houston, gal.	1.48	1.48	1.46
Caustic soda, 76% solid, drums, carlots, cwt.	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb.	0.58	0.58	0.66
Formaldehyde, USP, 37% [12% to 15% meth.], tanks, lb.	0.106	0.106	0.106
Glycerine, synthetic, tanks, lb.	0.81	0.81	0.73
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	0.450	0.450	0.715
Naphthalene, crude, tanks, lb.	0.22	0.22	0.22
Phthalic anhydride, tanks, lb.	0.305	0.305	0.245
Polyethylene resin, low density liner film grade (market price), lb.	0.44	0.43	0.32
Polypropylene, homopolymer grade (market price), lb.	0.40	0.38	0.34
Polystyrene, general purpose grade (market price) lb.	0.45	0.45	0.37
Shellac, bone dry, N.Y., lb.	1.65	1.65	1.65
Soda ash, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	0.35	0.35	0.30
Sulphur, crude, ex-terminal, Tampa, Fla., lt.	140.00	140.00	135.00
Sulphuric acid, 66%, commercial, tanks, ton	56.35	56.35	56.35
Titanium dioxide, anatase, reg., carlots lb.	0.69	0.69	0.69
Xylene tanks, gal.	1.28	1.35	1.42
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	324.40	324.15	323.45
Lumber, 2x[illegible], pine, mbf, cl	316.05	324.45	321.25
Plywood, plyform, ¾", msf, cl	571.95	570.30	538.05
Plywood, [illegible]", msf, cl	366.80	371.40	345.95
Cement, bulk, ton, tl	62.04	62.24	61.89
Sand, ton, cl	6.15	6.19	5.97
Ready-mix concrete, 3,000 psi/cu.yd., 15 cu. yd.	45.86	45.67	45.85
Crushed stone, 1½", ton, cl	7.82	7.87	7.89
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.76	0.76	0.76
Gypsum sheathing, ½"x1"x8", msf, tl	219.26	198.97	166.41
Brick, common, per thousand, tl	174.08	173.88	172.90
Asphalt paving, AC-20	164.21	163.82	156.72
Concrete sewer pipe, 12", prem. joint, per foot, cl	6.95	6.80	6.63
FUELS			
Fuel oil, No. 6 or Bunker C, Gulf., bbl	27.00	27.50	24.00
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	31.40	31.40	29.75
Gasoline, 91 oct., reg., Los Angeles, rack, gal.	0.850	0.860	0.830
Gasoline, 94 oct., reg., Chi., tank car, gal.	0.810	0.830	0.885
Heating oil, No. 2, Chi., bulk, gal.	0.825	0.800	0.803
Heating oil, No. 2, N.Y., bulk, gal.	0.878	0.873	0.778
Heavy fuel, PS 400, Los Angeles, rack, bbl.	26.25	26.25	26.50
Jet kerosene, gal.	0.805	0.800	0.790
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	0.420	0.425	0.465
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	102.00	102.00	67.00
Steel, No. 1, hvy., dlvd., Chi., ton	84.00	84.00	64.00
Copper, No. 1, East, wholesale buy, dlvd., lb.	0.600	0.655	0.715
Copper, No. 2, East, wholesale buy, dlvd., lb.	0.510	0.560	0.630
Brass, red, East, wholesale buy, dlvd., lb.	0.560	0.615	0.675
Brass, yellow, East, wholesale buy, dlvd., lb.	0.380	0.398	0.360
Alum., old sheet/cast, E., wholesale buy, dlvd., lb.	0.475	0.505	0.355
Alum., mixed clip., E., wholesale buy, dlvd., lb.	0.505	0.515	0.365
Zinc, old, East, wholesale buy, dlvd., lb.	0.185	0.185	0.080
Lead, clean solids, East, wholesale buy, dlvd., lb.	0.145	0.140	0.120
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	32.00	32.00	20.00
Paper, old corrug. box, dlr., N.Y., ton	29.00	29.00	18.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb.	0.130	0.135	0.100
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb.	0.32	0.34	0.36

[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]

Transportation cost forecast

Rate hikes, yes; double digit, no!

Budget for more freight rate increases. But they won't be spectacular for the most part—and there's certainly little indication of any return to the double-digit advances of a few years back.

That's the gist of this quarterly analysis of transportation trends prepared exclusively for ***Purchasing-World's*** readers by Wharton Econometric Associates.

Only a 6.3% increase in overall freight rates is anticipated for the year by the Philadelphia-based consulting firm which attributes this year's relative moderation to a series of factors:-

- the traditional lag in tariff boosts following a pickup in demand
- stable to even lower petroleum product prices
- surprisingly little upward labor cost pressure—reflecting the significant wage concessions that carriers were able to win from unions during the 1982-83 recession
- lingering overcapacity which continues to generate both intra- and intermodal competition.

Next year, however, could see somewhat stiffer rises as some of the factors noted lose their impact. Wharton pegs that overall advance at 7.9%. There are already signs that unions will attempt to recoup earlier concessions.

In any event, by then (1) petroleum product prices should be inching up, (2) overcapacity should be less of an industry-wide problem and (3) major truck and barge carriers will be faced with higher taxes.

Go beyond 1985, however, and there should be some relief—as the economy takes a breather. This will reduce transportation demand—probably enough to limit the increase in the 1986 freight bill to just a bit over 4%.

Rail: The industry has benefited from deregulation and has been able to increase its share of intercity traffic during the current recovery. Year-to-date figures show that the railroads have logged 22% more revenue ton miles than during the same period last year. Piggyback shipments have been a major contributor—advancing 20%.

As for the tab—rail rates will rise slightly slower that for other modes (5.4% this year and 7.5% in 1985)—as operating costs increase less rapidly. Mergers and increased intermodal traffic have clearly increased the efficiency of rail shipping. The fact that no large tax increases are on the horizon should also help limit rate increases.

Truck: A fair-sized recovery is underway here, too. Thus the American Trucking Association reports its truck tonnage index now runs 15% above year-ago levels.

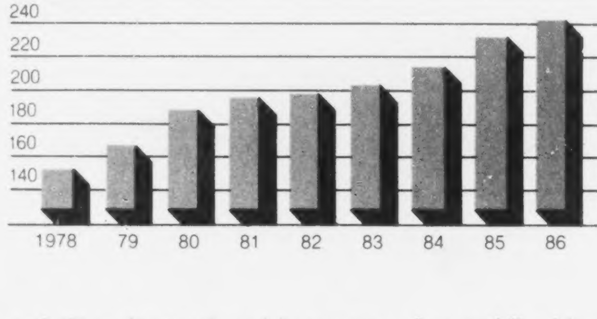
Truck rates, meantime, will increase faster than those for rail—if only because of a bill currently before Congress (and certain to pass) that will increase road use fees by imposing a 6¢/gallon tax on gasoline and a $600/year vehicle charge on trucks over 55,000 pounds. Best bets for rate increases here: 7.1% this year and 8.8% in 1985.

Barge: Overcapacity has actually reduced rates over the past few years. Upshot: waterway shipping is now a great bargain for large volume shippers. Barge rates will increase more strongly next year (7.3% to be exact)—as waterway user fees (in the form of a gasoline tax) increase from 8¢/gallon currently to 10¢/gallon in 1985.

Air: Freight traffic at latest report was running better than 20% ahead of last year. And while air freight prices will increase only a modest 6.4% this year, brace yourself for a big 11% boost next year. One consolation: most of the increases will come only in shipments of bulk freight. For a more detailed discussion turn to the story beginning on page 64. ***PW***

PurchasingWorld freight rate index

Index: 1972 = 100

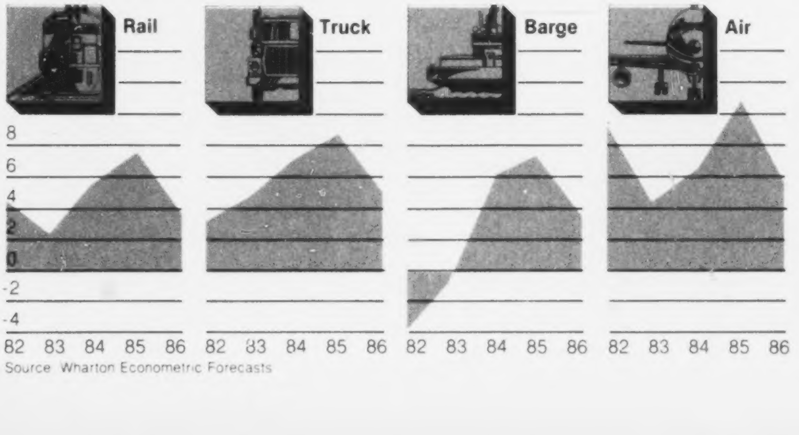


Increase over previous year	
1978	7.9%
1979	9.4%
1980	12.7%
1981	7.6%
1982	1.5%
1983	1.6%
1984	6.3%
1985	7.9%*
1986	4.2%*

* Estimated

Freight cost outlook by mode

Percent increase over previous year



Source: Wharton Econometric Forecasts

PW Outlook survey: prices

Prices are beginning to move up a bit faster.

But the overwhelming number of purchasing managers queried in a new nationwide survey by ***PurchasingWorld*** are confident that things won't get out of hand. Indeed, not one of the hundreds of responding buying executives sees any return to double-digit advances.

As one Midwestern metalworking PM puts it, "Rising demand virtually dictates more increases—and we are getting them. But with supplies ample or even more than ample—and vendor costs rising fairly slowly—I think it's the type of price climate we can handle without too much trouble."

There are, of course, some exceptions to this basic trend. Several buyers, for example, complain of a few big boosts in the paper and electronic components areas. But they hasten to add that other parts of their overall purchase mix haven't been faring all that badly.

■ **The past 12 months:** The average increase for the year ending this June is put at near 3%. But one out of five has done even better than that—experiencing no important change or even some slight decline.

On a sector-by-sector basis, freight seems to have fared best—with two out of five reporting no change or actual declines in their overall transportation bills. Not so raw materials and component parts, where increases over the past year have averaged out at near 4%—with only a handful able to negotiate declines.

■ **The next 12 months:** Some 71% of the respondents are bracing for some kind of acceleration—with the remaining 29% budgeting for the same rate of increase as experienced during the last 12 months. A speedup in the rate of advance is also suggested by the fact that more than 9 out of every 10 now see increases in the 4% or higher range—in sharp contrast to the past year when only one out of three experienced boosts of this magnitude.

All major sectors should contribute to this faster pace of advance—though again freight costs are expected to show somewhat lower-than-average increases.

In any event, average increases in the five key sectors monitored by PW are expected to be as follows over the next 12 months: raw materials (5½%), component parts (4½%), machinery (4%), energy (4½%), and freight (2½%).

■ **Problem areas:** As suggested earlier, there are a few items sporting higher-than-average boosts. And some feel this trend will continue. Thus, aside from paper and electronic components, several purchasing managers are bracing for some substantial advances in plastic resins, steel, aluminum, copper products, chlor-alkalis, and chemicals.

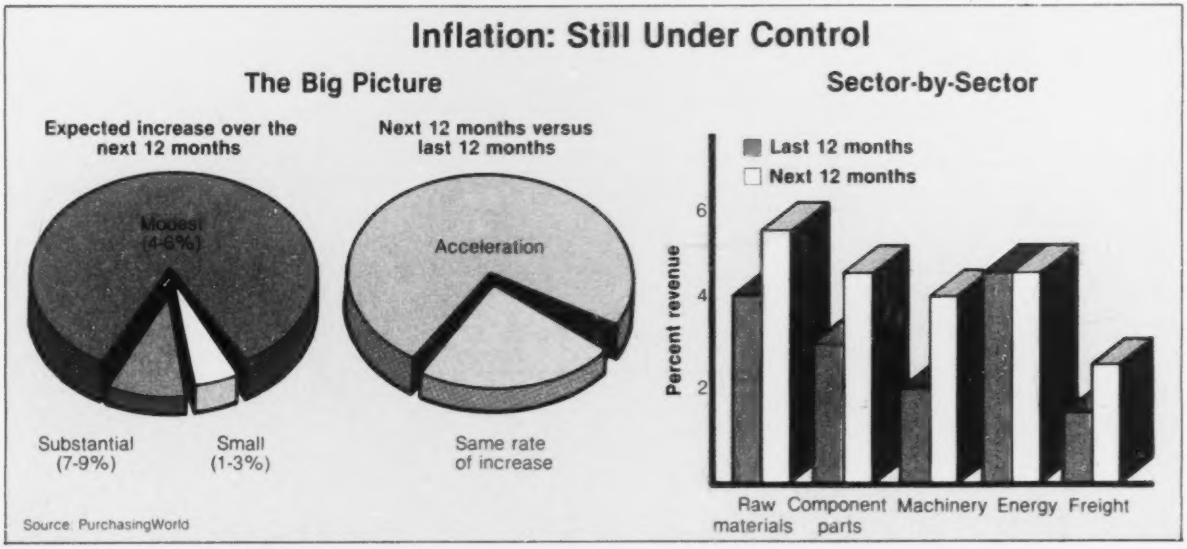
■ **Availability of discounts:** Many of the increases noted just above are expected to come in the form of lower discounts rather than higher lists. In any case, the number of products in the "subject to negotiation" category is still quite impressive—with substantial shading reported in steel, solvents, petrochemical monomers, glass, fasteners, packaging items, MRO supplies, and—last but not least—in freight where discounts as high as 20% and 30% are being obtained.

But many of these deals are not quite as lucrative as they once were. Thus, where 35% steel discounts were not all that hard to find as recently as late 1983, today a 20% off-list quote is considered good.

■ **Relatively weak areas:** On the other hand, there are still a few items where PMs feel they can hold the price line—even on a "transaction price" basis—over the next 12 months. These include fasteners, screw machine parts, styrene, lumber, selected electronic components (such as registers, capacitors, and solid state devices), electrical supplies, computers, copiers, and other types of office equipment.

Equally impressive from the PM point of view is the fact that things really have not deteriorated all that much since last fall

More to the point: Last September when PMs were asked what they saw ahead for prices, they put the average increase over the then-ensuing 12-month period at 4.2% (PW, 9/83, P. 90). Today, with activity at a much higher level, these same buyers are betting on only a one-half percentage point higher (4.7% to be exact) near-term inflation rate. ***PW***



Inflation: Still Under Control

Source: PurchasingWorld

JUL/1984

PurchasingWorld

PURCHASINGWORLD VOL 28, NO 7 JULY 1984

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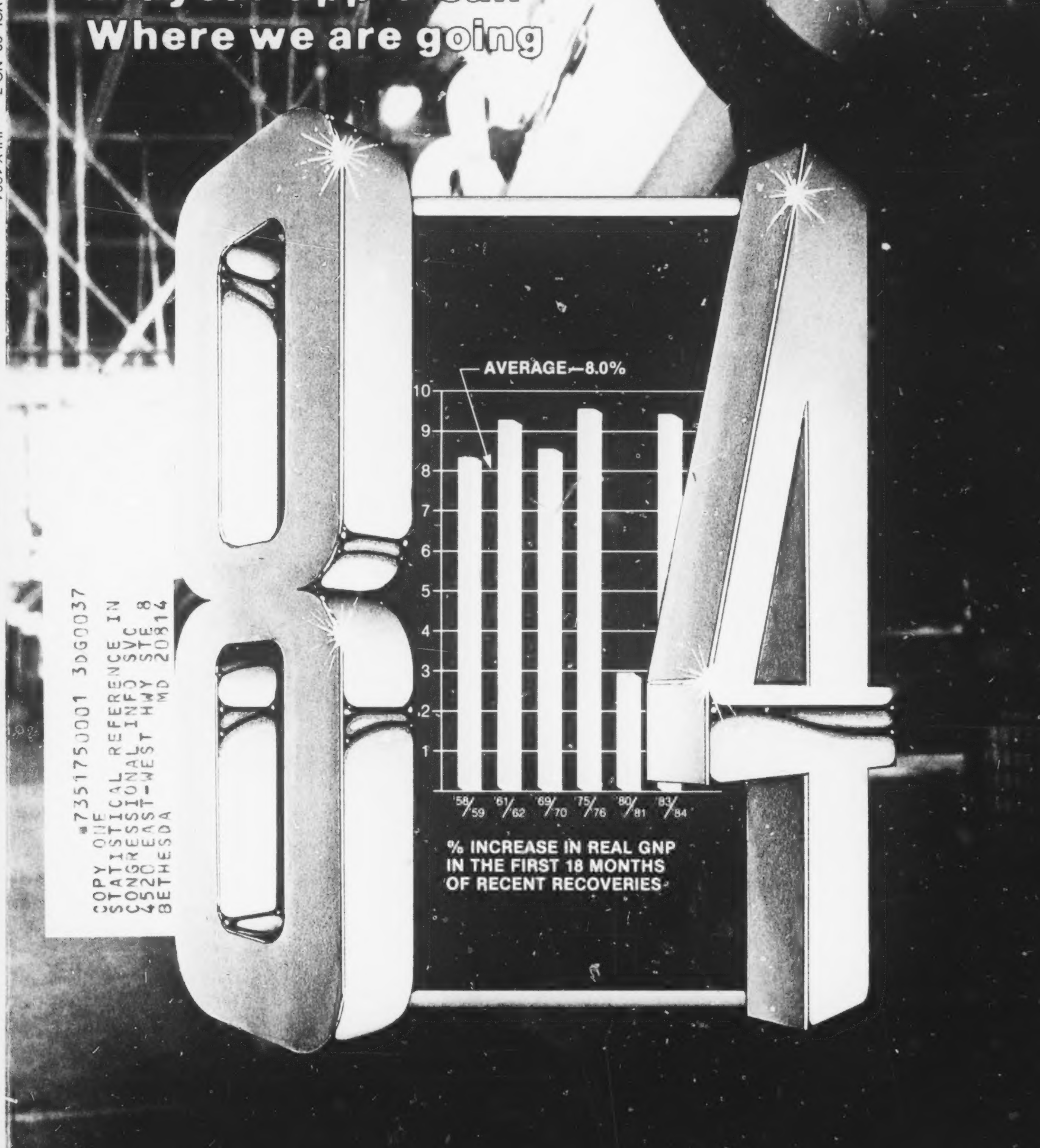
Midyear appraisal: Where we are going



% INCREASE IN REAL GNP IN THE FIRST 18 MONTHS OF RECENT RECOVERIES

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PurchasingWorld

Helping you manage the business of buying

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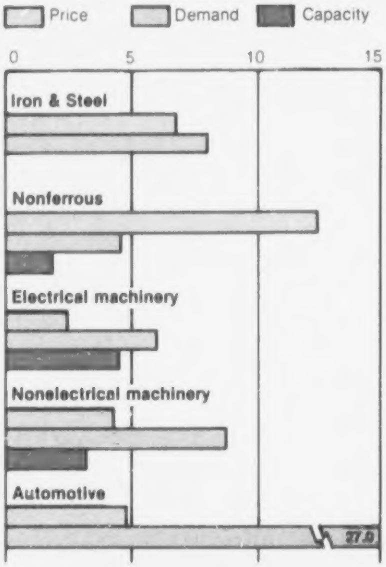
Industry-by-industry breakdown
(% increase '84/'83)



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PurchasingWorld (USPS 472 470) is published monthly by Huebner Publications, Inc., 6521 Davis Industrial Parkway, Solon, OH 44139. Printed in USA. Subscriptions: Available without charge to qualified purchasing executives in US manufacturing companies. Available to others in the US for $46/year, Canada $56/year. Foreign subscriptions are available for 70 airmail or £40 surface mail. Sole agent for all subscriptions outside the U.S.A. and Canada is J.B. Tratsart, Ltd., 154a Greenford Road, Harrow, Middlesex HA 13QT, England. Second class postage paid at Cleveland, OH, and additional mailing offices. Circulation and business offices: 6521 Davis Industrial Parkway, Solon, OH 44139. Editorial offices: 800 S. Northwest Highway, Barrington, IL 60010. © Copyright 1984 by Huebner Publications, Inc., subsidiary of International Thomson Business Press—All rights reserved. ISSN 0093 1659

Postmaster: Send address changes to **PurchasingWorld**, 6521 Davis Industrial Parkway, Solon, OH 44139.

PW PREDICTS

Robert S. Reichard, executive editor

Moderation in price outlook

Price moderation will continue to be the order of the day—not only for the rest of the year but probably through most of next year as well.

This isn't a "wishful thinking" forecast, either. Rather it is the nearly unanimous opinion of all the various groups surveyed in ***Purchasing World's*** regular semiannual business outlook which begins on page 51.

The reasons advanced for this basically optimistic scenario are pretty impressive, too. First and foremost, labor costs, while moving higher, aren't likely to get out of hand as they did during the last few recoveries. ***PW's*** own economic consultant, Dr. Louis J. Paradiso, for example, figures on a 7% increase in unit labor costs by 1985. While clearly above this year's estimated 3.7% advance, it is nowhere near the 12.2% and 11.1% increases during the peak years of the past two major expansions.

Other cost factors are equally reassuring. Thus the consensus among all the groups contributing to the new ***PW*** analysis is that energy tabs won't be moving up very much over the next few months.

Nor will financing charges rise significantly. To be sure, interest rates (key costs of doing business) are and will continue to remain at high levels. But since they will not be going much higher, their role as a catalyst in forcing further price advances should be rather negligible.

Still another decisive factor contributing to a modest rather than precipitous price increase is the expectation of fairly good market balance. Operating rate projections tell the story here. Given the combination of demand deceleration and the modest amounts of new capacity that will be coming on stream over the next year or so, the average U.S. factory next year will not be operating at much above the 85% level.

Then, too, there's plenty of excess capacity abroad—ready, willing, and able to fill in any gaps that may develop. In short, demand-pull pressures on prices will not be all that great over the next 12 to 18 months—with buyers for the most part still left with a fair amount of bargaining leverage.

Nor does that exhaust the list of price-restraining forces. Also worthy of note are (1) the outlook for a good crop year which should help hold food tags down, (2) a continuing firm dollar which will continue to assure strong import competition, and (3) today's basically non-inflationary psychology.

Last but not least, don't forget the Federal Reserve has made it crystal clear that it will not tolerate any new upward price surge.

Upshot: A surprisingly encouraging price outlook—given the fact that the business upturn will be going into its third year come next January. The consensus of econometric forecasts perhaps best sums it up: the average 1985 increase in the GNP price deflator is put at only 5.5%.

Receivable trends

Suppliers are bracing for a slowdown in accounts receivable payments—and they are making plans accordingly. So say credit managers responding to the latest National Association of Credit Management (NACM) survey.

Specifically, some 28% of those queried now see increases in days' supply outstanding over the next six months—the biggest such percentage in a year. Their reasoning: recent boosts in interest rates.

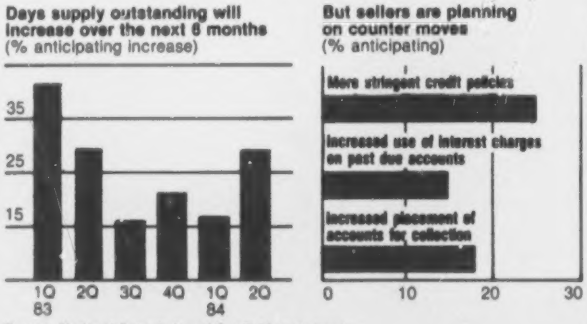
But they are not about to take it lying down; 15% indicate they'll probably step up their use of service and interest charges on past-due accounts.

The NACM, incidentally, doesn't give the actual number of accounts that are now past due. But another periodic survey done by TRW's Information Services Division suggests that this key measure is already beginning to rise. As of the latest report, for example, the figure was put at 25.3% of all accounts receivable—a fair-sized increase over the 23.2% reading of just three months earlier.

The NACM survey showed that an increasing number of the responding credit managers also indicate they are planning to place more accounts for collection. The pertinent figures here: 18% now vs. 12% three months ago.

It's all summed up in answers to yet another NACM survey question—this one on overall credit stance. Some 25% say they plan on a more stringent policy—five times the number who feel they might ease up a bit.

Accounts payable trends: a vendor view



Source: National Association of Credit Management

PW PREDICTS

Copper

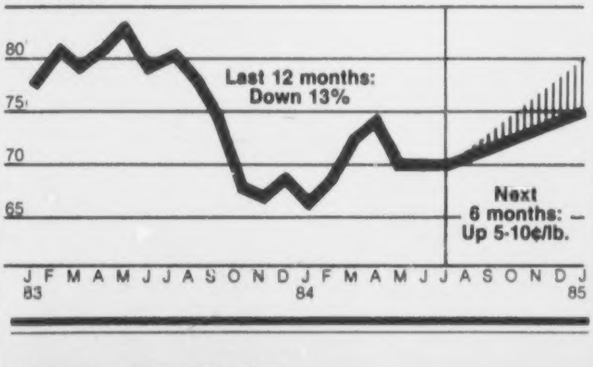
CURRENT SITUATION: The red metal continues to buck the general uptrend—at least as far as price recovery is concerned. Indeed, current quotes—still backing and filling around the 70¢/lb mark—are actually some 10¢/lb under the levels of early 1983 when the GNP curve first began to turn up. All this—despite some fair-sized consumption gains. Last year, for example, domestic metal demand ran more than 7% above the previous year's levels.

DEMAND: Another good-sized domestic increase is anticipated—aided by a pickup in the metal's big capital equipment market. Right now, the nation looks to consume nearly 1.9 million tons of refined metal—**up 6% or so from last year.** Next year demand gains are likely to taper off in line with expected GNP deceleration. Best bet at that time: **a 1% to 2% increase here and only about 2% to 3% for the Free World.**

SUPPLY: There's still more than enough to go around—and that's likely to be the case through the foreseeable future. The big problem is too much production. Free World inventories are not likely to drop by more than 200,000 tons—not nearly enough to upset the overall balance. Then, too, there's still plenty of excess capacity waiting in the wings. In the U.S. imports have forced producers to cut mine, mill, and smelter operations to under 60% of their potential.

PRICE OUTLOOK: The upward tug of demand will eventually have some impact. But it will require some delicate balancing—it took only 3% overproduction during the last three years to knock more than 30% off the going price. **Costs, too, suggest some upward creep** (most domestic producers need 85 to 90¢/lb copper to get back into the black.) Best bet: **a modest gain into the 75 to 80¢/lb range by yearend.**

Copper (producer price)
(Cents per pound)



Paper

More price increases loom ahead for the summer—as demand continues to bump up against capacity constraints. Newsprint will be up 7%—with increases also expected in most uncoated white paper grades. Another boost in linerboard can't be ruled out either.

Zinc

The recent bull market has run out of steam. Easiness is suggested by merchant sales which have recently been made at 51¢/lb. Then, too, there's new capacity coming on stream. On a more bullish note, demand looks to rise about 4% on a Free World basis this year. Also China is expected to take another big chunk of Western output. If these demand projections hold, then a small price boost into the mid-1950's range can't be ruled out by late fall or early winter.

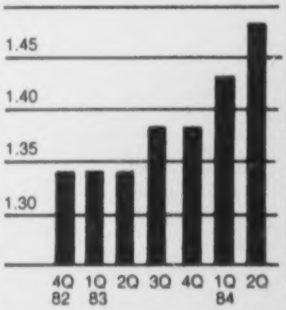
Office space

Shop around for bargains because there is still plenty of excess office space around. Coldwell Banker (a compiler of such data) puts the average vacancy rate at 13.1%—an all-time high—some 2.4 percentage points above a year ago and more than three times the rates of 1980 and early 1981. Highest rates (15% and up) are noted for Dallas, Denver, Houston, Miami, Nashville, New Orleans, Phoenix, Portland, OR., Sacramento, San Diego, and Seattle. But industrial site vacancies are leveling off, with an overall 4.8% vacancy rate noted now compared to the high of 5.1% reached some six months back.

Magnesium

The third increase in just over a year will bring quotes up to the $1.48/lb level—some 5¢/lb above the previous existing list. No further price hikes seem in the offing for a long time. Reason: Magnesium could be putting itself at a pricing disadvantage with aluminum—particularly if the metal's boosters hope to make inroads against aluminum in the hotly competitive die casting market.

Magnesium
¢/lb



Printers

Look for laser printers—now available only on large mainframe computers—to become available on desk-top versions later this year. The big pluses over letter-quality impact types: The laser versions are generally 6 to 12 times faster and they run much more quietly. But expect to pay through the nose for the new technology. The models scheduled for introduction by fall or winter will set you back $3,000 to $6,000, two to four times more than premium letter-quality printers.

Aluminum

Earlier predictions of further price boosts are not materializing. One reason: producers both here and abroad may have been overly optimistic in bringing potlines back into production. Note, for example, the big jump in Free World operating rates from a low of 70% early last year to the current 86% rate—more than enough to meet demand which looks to be up only 5% for the Free World as a whole. All this suggests that the 85¢/lb ingot quote previously projected for yearend is way out of line. As things now stand, it's hard to see prices climbing up to even 80¢/lb by that time.

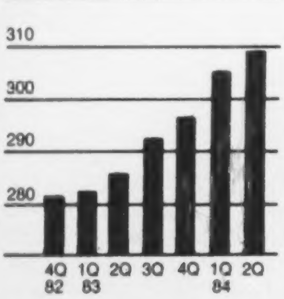
Computers

Look for more near-term weakness in personal computers—as smaller producers react to IBM's recent 18 to 23% reduction in its PC and PCjr lines. Declines will vary, but should generally run in the 10 to 15% range. Don't rule out some "bundling"—with some firms likely to offer software along with their hardware at no extra cost to the buyer. There's more competition looming in the home computer sector, too. Thus, (1) the Japanese are expected to introduce new models in the $300 to $500 range and (2) Commodore is scheduled to come out with a more powerful model that will sell for as low as $100.

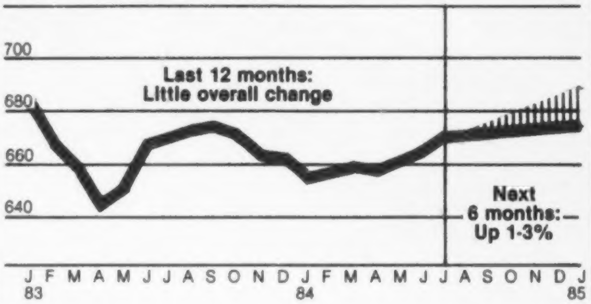
Plastic resins

Price pressures for the most part have been surprisingly moderate—despite big demand gains and closer-to-capacity operations. These late spring vs. the yearend 1983 levels (all on a market or transaction basis) tell the story: liner grade low-density polyethylene (plus 3.8%), blowmolding high-density polyethylene (−2.8%), homopolymer polypropylene (plus 9.2%), and crystal molding polystyrene (no change). Only pipe grade PVC has soared—from 26¢/lb to nearly 40¢/lb. Where do we go from here? Best bet: a 3 to 4% average overall hike over the last six months of this year.

Plastic Resins
(Index: 1967 = 100)



Fuel and power
(Index: 1967 = 100)



Energy

CURRENT SITUATION: Energy worries remain minimal—despite the festering Persian Gulf crisis. Lest there be any doubt on this score, look at continuing price easiness—with gasoline and other petroleum products actually moving at under year-ago levels. Aggregate fuel and power tags are running just about even with a year ago (see chart). **Behind the easiness: (1) an oil glut**—aggravated by rising non-OPEC production and **(2) relatively modest consumption gains in all sectors.**

DEMAND: The conservation impact can best be seen in oil. Thus while the nation will sport a near 6% growth rate this year, **demand for petroleum products looks to be rising at only half the rate (3%).** Other fuel and power sectors won't be setting the world afire either—with only a modest 3.5% increase anticipated for overall energy. Look for these 1984 estimated consumption gains: **3.5% for natural gas, 5.1% for coal and 6.9% for nuclear power.**

SUPPLY: It looks like a no-sweat situation in oil—unless, of course, there is an all-out Mideast blowup. **The same is true of electricity.** (Power is not only abundant now but is expected to remain so for at least another few years—given today's 30%-plus reserve margin and an expected low 3%-per-year long-term growth rate.) **Gas supplies, too, look adequate**—though the surplus will gradually disappear over the next 12 months.

PRICE OUTLOOK: Good news here—with average advances expected to lag behind the general inflation rate. One big econometric forecasting firm, for example, puts the compound annual rate of advance for overall energy tags at 3.8% over the three-year period ending fourth quarter 1986—nearly two full percentage points under the 5.5% annual raise seen for all producer prices over the same period of time.

Lead

Prices have firmed as strikes begin to upset overall supply-demand balance. Further increases into the low 30s range could well be in the making by late summer if work stoppages aren't resolved. Reason: That's when the battery buying season begins to pick up again.

Outlook for electronic security equipment

Count on buying a lot more electronic equipment in the years immediately ahead.

How much more? Predicasts Inc., the big Cleveland-based research firm, puts the dollar purchases at more than $4.4 billion by 1988—the equivalent of an 11% annual rate of advance over last year's $2.6 billion total.

Nor will most of the outlay gains be earmarked for financial and consumer markets. The study suggests that transportation and industry will also be increasing their buys almost 10% annually.

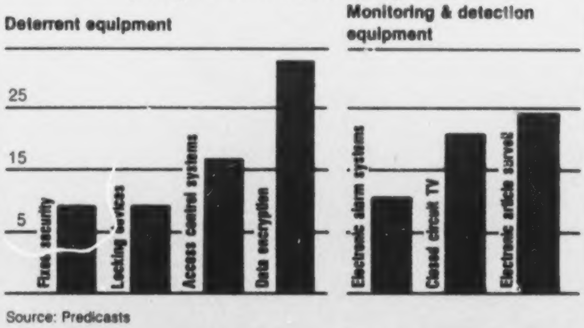
Looking at the types of equipment, the biggest rate of increase will be going into data encryption—a type of equipment used to combat the growing number of criminals who have chosen computer terminals over conventional burglary tools. Predicasts sees growth here running at an amazing 33% annually through 1988.

Another big percentage gainer (at an annual rate of 20% over the next five years) will be closed circuit TV (CCTV) systems. They are finding their way into more and more industrial, residential and commercial complexes because they can provide continuous surveillance and intimidate would-be criminals while reducing manpower costs and safety risks.

Meantime, in terms of aggregate dollars, electronic alarm systems are expected to remain in the number one spot. Purchases here will expand about 9% annually through the near-term, rising from $885 million in 1983 to more than $1.3 billion in 1988 when they are expected to account for nearly one out of every three dollars spent on electronic security.

Security equipment: big growth ahead

(Average annual % increase through 1988)



Source: Predicasts

Steel

While further flat-rolled boosts are coming—they're not likely to be all that earth-shaking—at least as far as the really big volume users are concerned. Sign of the times: GM has has negotiated fixed prices for 1985 models calling for only a 4% overall increase. Meantime, demand may be ready to level off. Third and fourth quarter totals, for example, should average out at only 19 million tons vs. the more than 20 million tons averaged over the first two quarters. Imports, too, remain a price-rise inhibitor. Recent gains here suggest some 20 million tons could enter this year—up 15% from last year and the equivalent of 21 to 22% of total U.S. chewup.

Computer software

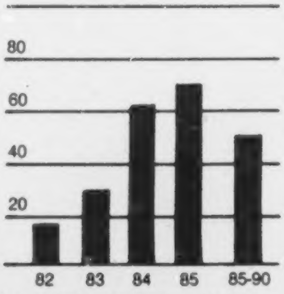
New price declines seem all but inevitable—following IBM's introduction of new programs for its personal computer lines at surprisingly low prices of $149 or less. Programs cover word processing, filing, financial analysis, report writing, and graph making. The above and earlier moves by the computer giant have already forced a few companies to reduce quotes on work processing programs by as much as 33%. Some industry analysts see the latest moves as the start of a fierce industry battle that could send all software tags tumbling.

Robots

The robot revolution is still going strong. According to a new study by Henderson Ventures, a big California-based electronics consulting firm, worldwide sales will jump from $690 million last year to nearly $8.7 billion by 1990, the equivalent of a whopping 44% annual rate of gain. Reason: These intelligent machines are becoming more sophisticated and with lower cost per function. The trend will be to robots that have vision and/or tactile sensing, both areas in which U.S. technology excels. And with even more technology breakthroughs expected, prices in these two areas should decline significantly over the next few years. ***PW***

U.S. Robot Production

(% annual growth)

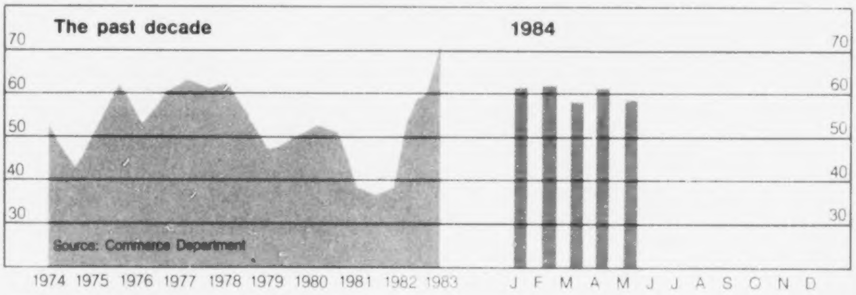


Source: Henderson Electronic Market Forecast

BUSINESS DATATRAK

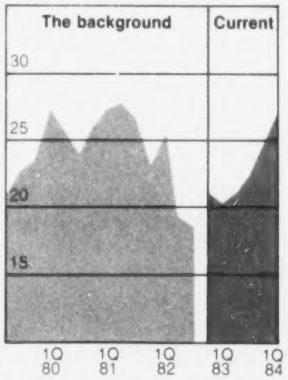
NAPM business barometer

Based on five indicators (employment, inventories, new orders, production, vendor performance)

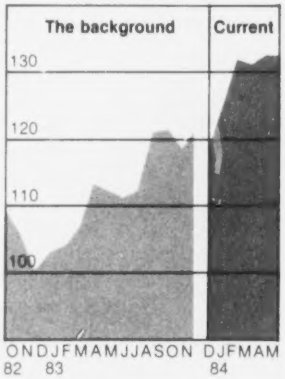


Leading indicators

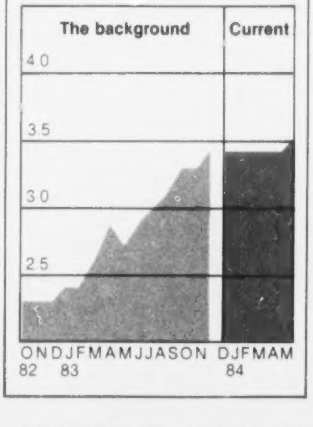
1. Capital appropriations
(Billions $)



2. Industrial distribution sales
(Index: 1977 = 100)



3. Factory overtime
(Hours)



KEY ECONOMIC TRENDS

Recovery good 'til early fall

The current business recovery—now a full year and a half old—shows every indication of continuing through this summer and early fall.

Perhaps the most encouraging sign on this score is the continued pluses being registered by leading indicators. Thus the N.A.P.M. Business Barometer (chart above) is currently being clocked in at 58.7—nearly nine full points above the neutral "50" level and not all that much under the peaks of a few months back.

Add in Uncle Sam's own leading indicator index (also positive)—though the gains here are considerably less robust than those of earlier this year—and it's hard not to predict further growth over the July-September quarter.

In fact, some economic barometers actually look better than they did back in the first and second quarters. This is especially true in the capital spending sector. New plant and equipment appropriations are currently running 11% ahead of levels reported three months earlier.

This fourth consecutive increase, according to the Conference Board which compiles these figures, suggests that spending could be up as much as 25% this year for the nation's 1,000 largest manufacturers.

The Commerce Department's plant and equipment series, which includes many smaller firms that tend to spend less also looks increasingly bullish. The latest expected gain here is put at 15% vs. the 13% suggested a few months back— after adjusting for higher prices.

Industrial distributor sales are also indicative that things are still moving in the right direction. This barometer, which reflects grass roots manufacturing needs, remains on a high plateau—nearly 30% above the lows hit back in late 1982 (center chart).

Also pointing to a good summer is the current high level of factory overtime (bottom chart). Figures are now close to their highest level in 10 years.

What makes the latest readings even more encouraging is the fact that overtime traditionally tends to level off in the second year of a business expansion—as it becomes more economical for a company to add more workers than pay out expensive overtime. Not so this time around.

All of the above is not to say that there aren't some signs of slowing down a bit. For one, the current high mortgage rates are beginning to have a dampening impact on housing starts. And while auto sales remain extremely brisk, they are now on a high plateau rather than in a growth period.

This steady rather than rising pattern is also reflected in consumer buying plans—as reported by the Conference Board. Projected auto purchases, for example, dropped down to 8.1% (vs. 8.5% the previous month), and major appliance purchases are also expected to slack off slightly—from 26.9% to 26.0%

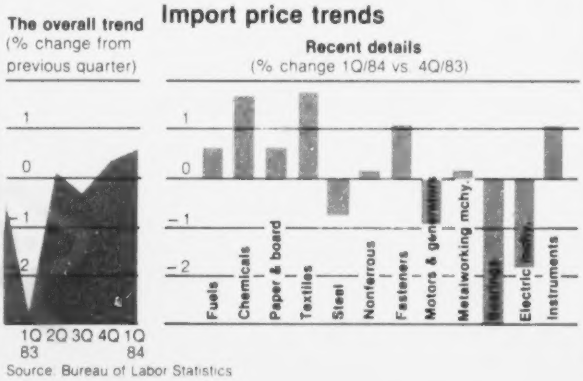
Upshot: further near-term GNP and industrial production gains, while they still seem all but certain, may be a bit less robust than those of the last few quarters. On the crucial manufacturing output front, for example, current indicators suggest a 5 to 6% increase at annual rate over the next three months—good but nothing near the double-digit advances posted during the last quarter 1983 and the first quarter.

The longer-term outlook, meantime, also suggests moderation—but no actual downturn.

Import price hikes are modest

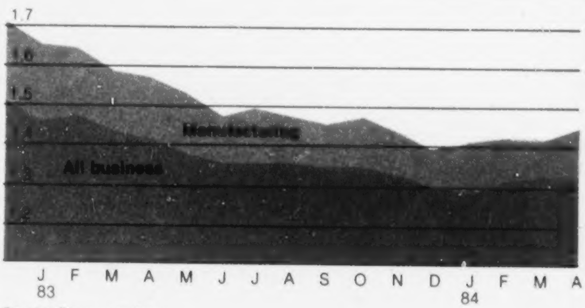
Import tags, after falling through much of last year, are beginning to edge up again. But the increases have been relatively modest—.5% over the latest quarter, or the equivalent of only a 2% annual rate. That's a bit under recent boosts in comparable domestic price indexes. Result: Imports continue to come in at a record clip—enough to force as much as a $100 billion trade deficit for 1984.

- **Crude materials:** A sharp 4.7% increase was noted here during early 1984—more than offsetting a 1.4% fourth quarter 1983 decline. On the upside were wood (7.1%), pulp and waste paper (8.3%)—with smaller boosts for crude rubber, metal ores, and scrap.
- **Chemicals:** Prices of these imports rose 1.7% for the second consecutive quarter. The increase was attributable to a seasonal increase in fertilizer prices and a rise in inorganic chemicals.
- **Intermediate products:** offsetting moves here. Rising over the latest three-month period were textiles (1.8%), nonmetallic minerals (1.2%), and instruments (1.1%). Smaller advances were noted for rubber, paper, paperboard, and nonferrous metals. In contrast, declines were recorded for cork and wood (−3.4%), and iron and steel (−0.8%).
- **Highly fabricated goods:** again offsetting trends. Increases were registered for general industrial machinery (0.2%), office machinery (0.9%), and metalworking machinery (0.2%). But declines were noted for electric machinery (−1.8%), road vehicles (−0.5%), specialized machinery (−0.5%), and telecommunications equipment (−0.7%).



Import price trends

Source: Bureau of Labor Statistics



Inventory sales ratios

Source: Commerce Dept

Key ratios edging up a bit

Inventory-sales ratios remain in surprisingly good shape these days.

To be sure, the key ratios (both for manufacturing and all business) have bottomed out—and are even beginning to edge up a bit. But as the accompanying chart shows, they're still far under the levels of early last year when the recovery was just beginning.

Admittedly, stock-sales ratios always decline in the beginning stages of such recovery periods because sales increase faster than inventories can be replaced. But this time around, the drop has been sharper and has lasted for a longer period of time.

Behind this encouraging showing is a combination of factors—including (1) relatively few fears of shortages, (2) a non-inflationary climate which tends to discourage any tendency to hedge, (3) topside pressures to control costs in a time of exceptionally high carrying charges, and (4) better inventory controls—along with the trend toward just-in-time deliveries.

Where do we go from here? Dr. Louis J. Paradiso's forecasts suggest the beginning of a more cautious approach to further accumulation as business gains slow down. By next year, he puts accumulation in 1972 dollars at $5 billion—only one-third this year's estimated $15 billion advance.

That's not all that much out of line with the nation's expected demand performance. This may be the first time in post-war history that we will be able to avoid a big inventory buildup—the kind that inevitably contributes to a subsequent recession.

CURRENT PRICES

Prices holding steady for now

That's not to say there haven't been a few fair-sized increases on both list and transaction levels. But for the most part they have been scattered—to the extent that Uncle Sam's widely monitored producer price index has probably moved up by less than 2% over the first 6 months of the year (or less than 4% at annual rate).

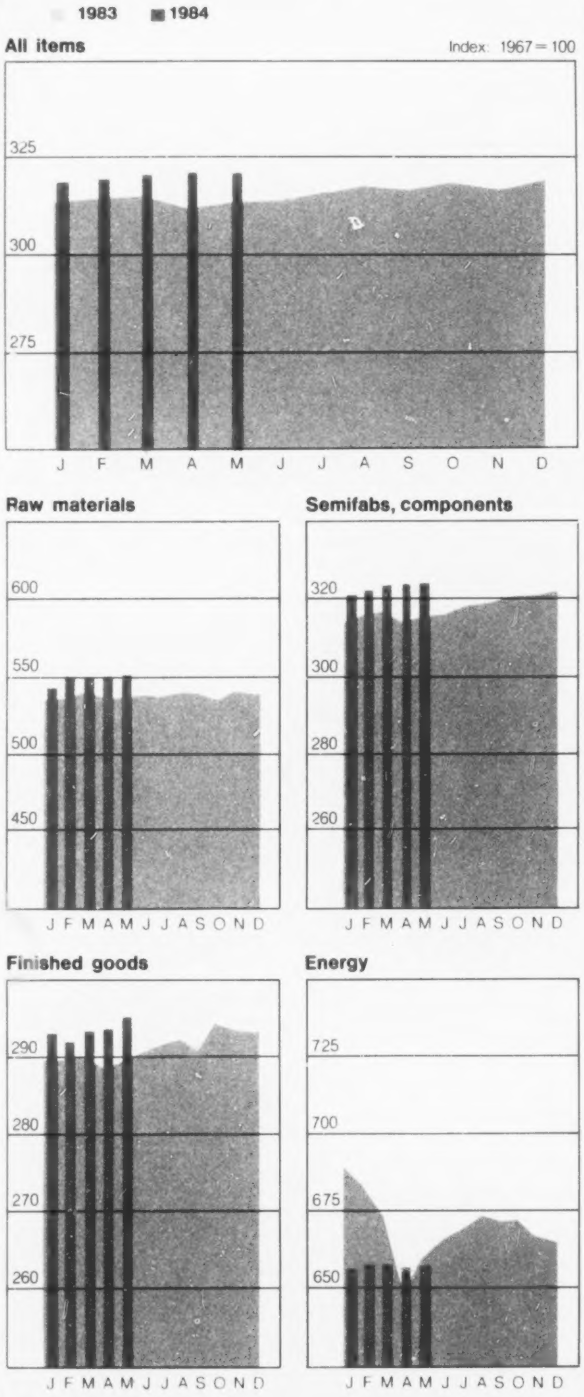
Nor is any great near-term acceleration anticipated. Thus, as indicated in *PW's* special 1984 mid-year outlook report (see page 51), econometric models are signaling only about a 3½% increase for the year as a whole.

Helping the trend along has been the continued flatness in energy tabs.

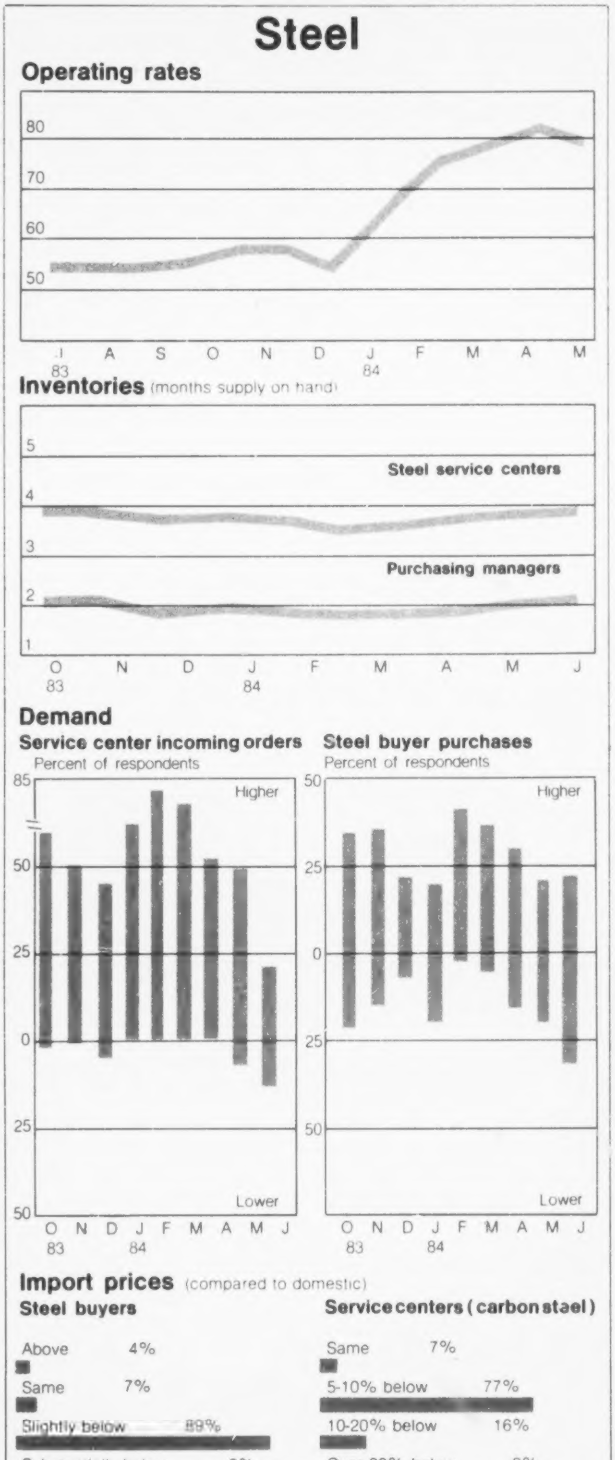
This month's breakdown

	Latest level (Apr)	% change from: Month ago	Year ago
Bearings	338.8	0.7	2.3
Bolts, nuts, etc	274.4	0.7	2.3
Chemicals, inorganic	290.8	0.0	−2.7
Chemicals, organic	371.4	−0.4	3.9
Concrete products	308.8	0.8	2.6
Corrugated cartons	263.7	1.4	10.1
Cutting tools, small	280.1	0.1	0.3
Electric lamps (bulbs)	346.8	1.6	11.8
Electronic components	190.6	−0.1	5.5
Fans and blowers	341.6	0.0	1.5
Foundry and forge products	359.6	0.8	2.1
Fuel oil (residual)	1110.3	−0.5	9.3
Furniture, commercial	297.5	0.4	3.9
Gasoline	572.6	0.7	1.5
Glass, flat	229.5	−0.1	−0.1
Glass containers	358.4	1.9	1.4
Gypsum products	353.1	4.0	29.9
Hand tools	356.0	0.3	1.9
Hand tools, power driven	223.0	−0.6	0.3
Industrial furnaces	371.7	0.3	2.8
Integrating and measuring instruments	229.6	0.3	4.8
Internal combustion engines	343.1	0.0	0.3
Lubricating oil	797.9	0.0	1.2
Lumber millwork	307.7	−0.6	1.6
Material handling equipment	287.6	0.1	1.0
Metal containers	345.5	0.0	4.1
Metal mill shapes (nonferrous)	328.2	0.8	7.4
Metalworking machines	332.4	0.7	1.9
Metal tanks	305.6	0.1	−0.2
Motors and generators	339.3	0.4	4.4
Motor trucks	282.4	0.4	4.6
Office and store equipment	154.8	0.1	0.2
Paperboard	275.4	0.7	11.0
Paper boxes and shipping containers	262.4	1.4	6.5
Paper office supplies	244.6	4.7	7.8
Paint	267.3	−0.1	1.0
Plastic resins	308.6	0.7	8.1
Precision measuring tools	253.0	0.0	3.2
Pumps and compressors	349.3	0.5	0.3
Refractories	362.9	0.2	7.3
Rubber belts and belting	334.5	0.5	2.7
Scales and balances	231.2	0.3	2.1
Steel products	360.9	0.1	4.0
Switchgear	271.7	0.5	−0.4
Textiles, synthetic fibers	160.6	−0.4	4.4
Textiles, gray fabrics	153.0	0.1	4.9
Tires and tubes	243.2	0.4	−1.3
Transformers and power regulators	226.4	0.2	0.4
Welding equipment	279.0	0.8	−0.1
Wire and cable	204.6	1.4	0.0

Industrial prices



Source: Bureau of Labor Statistics



Source: Steel Service Center Institute, NAPM Steel Buyers Committee

True, there has been some inching up, in coal (probably due to some hedge buying against the possible mine strike later this year), but that's about it.

The picture is much the same in the nonferrous sector. Aluminum, copper and zinc have been doing little more than marking time.

Even steel (while edging up as this count narrows) isn't all that strong. Sign of the times: GM's nailing down of 1985 contracts calling for only about a 4% overall increase.

Nor are chemicals all that firm. Petrochemicals such as ethylene and propylene are only inching up. And even the big volume plastics are finding it hard to post significant boosts, despite the second consecutive year of double-digit demand gains.

Finally, there's capital equipment. A new Commerce Department report here indicates that plant and equipment will show little or no price increase this year—as imports and domestic infighting make for good bargains.

STEEL SCENE

Demand may take slight breather

Steel demand may be about to take a temporary breather. At least that's what distributors and steel buyers are telling the survey takers these days.

- **Buyers:** Some 32% of PMs responding to a new N.A.P.M. steel survey now anticipate a drop in their steel receipts over the next three months—substantially outweighing the 23% who feel that more increases may be in order. That's the first time in nearly a year and a half that decreases have topped increases.

- **Service Centers:** Only 22% of distributors replying to the latest Steel Service Center Institute (SSCI) survey are projecting increases in orders over the next few months. While a bit above the 18% figuring on a decline, this is the smallest such "increase" since December 1982—and a far cry from the 75% and 80% readings noted during the first few months of the year.

Nevertheless, service centers remain basically optimistic for this year. SSCI president, Andrew G. Sharkey, is still talking in terms of a 10-12% advance over the industry's 17 million tons shipped in 1983. And a few of the more optimistic centers still feel a 15% gain is attainable.

Also, some sectors of the country are doing better than average. This is especially true in New England where talks of 30%-plus tonnage gains for 1984 are still being discussed.

Still another reason for optimism is the growing portion of the steel market that service centers have been capturing. Five years ago they accounted for just over 18% of total domestic steel shipments. Last year the figure jumped to 21%—and in recent months it has approached the 25% level.

Still another reason for

...continued

optimism is the growing portion of the steel market that service centers have been capturing. Five years ago they accounted for just over 18% of total domestic steel shipments. Last year the figure jumped to 21%—and in recent months it has approached the 25% level.

And this trend is likely to continue. According to Sharkey, the trend to just-in-time deliveries will help give distributors an increasingly large part of the action. Within 25 years they will be accounting for more than 50% of all domestically produced carbon steel.

But right now, both service centers and buyers continue to fear scattered supply problems. Product lines most often mentioned in this respect include hot-rolled sheet, cold-rolled sheet, and coated sheet.

Even here, however, things may be looking up. Both service centers and buyers say that the situation has improved somewhat over last month.

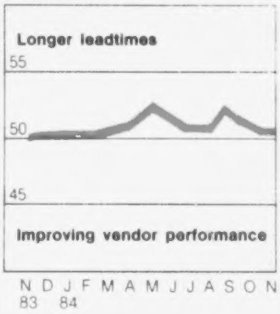
Also indicative of a possible steel buying pause is the slow creep-up in stock-sales ratios over the past few months. The increases have been small, but they do suggest more caution—particularly during the summer months when activity is generally slower.

Finally, a few words on imports. The bargains noted over the last few months continue, as 16% of the service centers report foreign quotes on carbon steel running 11-20% under comparable domestic levels—with an even bigger 25% saying the same thing about stainless.

Monthly procurement status report

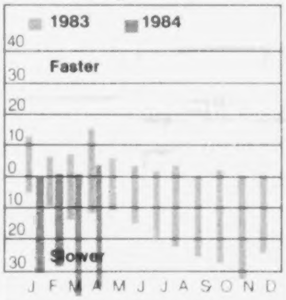
Leadtime index

A 'diffusion' index based on 158 key commodities. Above '50' indicates a tendency for leadtimes to stretch out. Below '50' suggests improving vendor performance.

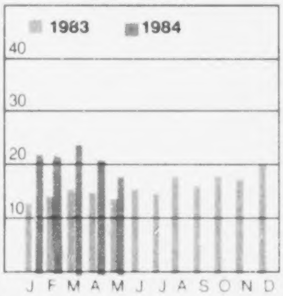


Delivery performance

Percent reporting deliveries

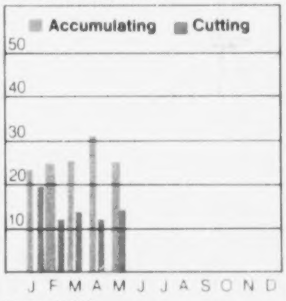


Forward commitments



Inventory strategy

Percent of respondents



Source: NAPM

PROCUREMENT STATUS

Leadtimes show stability

Leadtimes are finally beginning to show some signs of stabilizing—but at levels well above those posted at the beginning of 1983 when the current business upturn first got underway.

As of now, there are almost as many buyers reporting stretchouts as those who are noting decreases. ***Purchasing World's*** exclusive leadtime index is now being clocked in at only 51—just one percentage point above the neutral (no change) 50 mark.

Also suggestive of a less hectic buying environment is the decreasing number of buyers experiencing slower deliveries. According to the N.A.P.M. Business Survey Committee (the compiler of this data), only 28% now report slowdowns—well under the 35-40% readings of the previous two months.

While it's hard to pinpoint precisely where the improvement has actually occurred, some buyers suggest that electronic components (while still a headache) aren't nearly the hassle they were earlier this year. Also steel and paper product waits—while still slow—aren't quite the problem they were a while back.

Also indicative of a calmer purchasing climate is the reduction in forward commitments. Two months ago, 24% were committing 90 days or more in advance for production materials. The figure has now dropped down to only the 18% level.

The tapering off of inventory accumulation is yet another sign of a less-pressured situation. Only 10 percentage points separate those who are still adding from those who are cutting back. That's nearly half the 18 percentage point gap recorded during the previous month.

As one purchasing executive sums it up, "Sure we still expect problems and headaches. But they should be fewer and of shorter duration come fall and winter as high interest rates begin to slow down demand for both consumer and producer products."

Leadtimes and availability

Chicago: Moving out to these new weekly levels are potentiometers (8-16), printed circuit boards (10-30), thermistors (8-16), chrome chemicals (1-1.5), caustic soda (1-2), h-r steel sheets (6), steel plates (4-5). But coming in are c-r sheets (7), brass rods (4), narrow galvanized sheet (5), and aluminum sheet (12-14).

Cleveland: Some modest extension in cold finished aluminum (to 14 weeks) and coil coating paint (to 5-6). Unchanged are alloying materials (on demand), glassines and greaseproof papers (4-5), lumber (3), plastic packaging materials (2-3), plastic shrink film (3), multiwall paper (8-10), corrugated (3), and polyethylene and PVC (3-4).

Los Angeles: Printed circuit boards have come in (to 8 weeks). The same is true of computer peripherals (to 6), and electrical equipment (to 24). Moving out somewhat are wire and cable (6-8), and passive electronic components (30). Unchanged are pumps (8-10), grey iron castings (8-10), stainless (16), and galvanized steel (16).

BUSINESS DATATRAK

Houston: Pretty much of a standoff here—with this sampling of current leads in weeks: High pressure heat exchangers (26-60), forgings (5-7), control valves (9-26), mill steel (4), service center steel (1), chemicals (0-1), MRO supplies (3), air compressors (4-6), electric and electronic components (8), oils and lubes (0-1).

Philadelphia: A modest stretchout is noted in diodes (to 16-18 weeks)—with more lengthening likely. Also out a bit are tantalum capacitors (10-12), and integrated circuits (14-16). But single and double-sided PC boards are in (8-10). No changes in steel items, ditto for resistors, sockets and potentiometers, fasteners, and bearings.

Pittsburgh: Manganese has moved out to 6 weeks—with silicon also extended—to 6. Other typical leads (in weeks): plastic bags (3-4), multiwall bags (6), corrugated and folding boxes (3-4), drums (1), waterproof papers (8), lumber (3-4), steel strapping (2-3), maintenance paint (5), polyethylene (5), PVC (6), nickel (2), and zinc (4).

Leadtimes (in weeks)

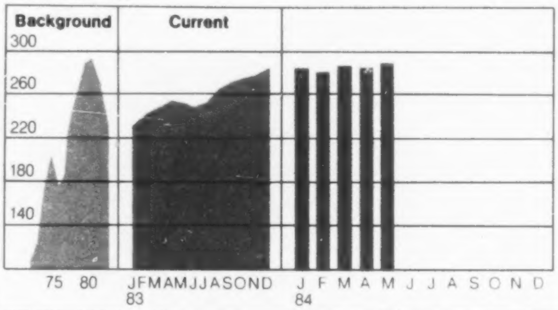
	Now	Month ago	Six months ago
STEEL			
Sheet (Phil)	9	9	7
C-R Sheet (Chgo)	8	8	10
Plate (Phil)	10	10	6
Plate (Chgo)	3½	3½	3
Reinforced (Hous)	6	6	6
H-R Bars (Phil)	7	7	4½
H-R Bars (Chgo)	3	3	2½
Cold-Drawn Bars (Phil)	7	7	4½
Galvanized (LA)	16	16	11
Galvanized (Chgo)	8	8	7
Structurals (Chgo)	3½	3½	2½
Structurals (Hous)	17	17	15
Tubing (Phil)	7	7	7
Grey Iron Castings (LA)	9	9	6½
Steel Castings (Hous)	11½	11½	11½
Forgings (Hous)	6	5	5
Pipe, Carbon (Hous)	13	13	13
ELECTRIC & ELECTRONIC			
Cables (Chgo)	8½	8½	8½
Capacitors (Chgo)	17	17	14
Circuit Breakers (Chgo)	6	6	6
Electromech. Devices (LA)	13	13	7
ICs (Linear) (Phil)	20	20	11
Motors (Phil)	15	15	21
Motors, 1000 hp & Up (Hous)	39	39	39
Printed Circuit Boards (Chgo)	20	17	10½
Relays (Chgo)	15	15	15
Resistors (Chgo)	14	14	10
Resistors, Wirebound (Phil)	10	10	9
Transformers (Chgo)	10	10	10
LUMBER			
Hardwood (Pgh)	3	3	3
Hardwood (Clev)	3½	3½	3½
Plywood (Chgo)	1½	1½	2
Plywood (Phil)	1½	1½	1½
Softwood (Clev)	3	3	3
Softwood (Phil)	1/5	1/5	1/5
Softwood (Pgh)	3	3	3
Particleboard (Phil)	2½	2½	2½
CHEMICALS-PLASTICS			
Adhesives (LA)	½	½	½
Napthalene (Chgo)	2	2	2
Paint (LA)	5	5	4
Paint, Coil Coating (Pgh)	4	4	4
Paint, Maint. (Cleve)	3	3	2½
Polyester Resin (LA)	2	2	2
Polyethylene Resin (Cleve)	3	3	2½
Polyethylene Resin (Pgh)	4	4	4
PVC Resin (Chgo)	3	3	2½
PVC Resin (Pgh)	6	6	4
Titanium Dioxide (LA)	1	1	1
PACKAGING			
Bags, Kraft (Pgh)	5	5	5
Bags, Multiwall (Clev)	9	9	9
Bags, Multiwall (Pgh)	6	6	6
Cartons, Corrugated (Cleve)	3	3	3
Cartons, Corrugated (Hous)	3	3	3
Cartons, Folding (Phil)	6½	6½	6½
Cartons, Folding (Pgh)	3½	3½	3½
Cellophane Wrap (Phil)	5	5	5
Plastic Bags (Pgh)	3½	3½	3½
Plastic Pkg. (Pgh)	3	3	3
Shrink Film (Chgo)	4	4	4
Shrink Film (Clev)	3	3	3
Drums, Fiber (Pgh)	1	1	1
Drums, Steel, Std. (Pgh)	1	1	1
Wood Pallets (Chgo)	2½	2½	2½
Wirebound Boxes (Pgh)	4½	4½	4½
Strapping (Clev)	2½	2½	2½
Strapping (Pgh)	3	3	3
PAPER			
Fiberboard (Clev)	3½	3½	3½
Glassine (Clev)	4½	4½	4½
Glassine (Pgh)	5½	5½	5½
Groundwood (Clev)	4½	4½	4½
Groundwood (Pgh)	7	7	7
Kraft (Clev)	1	1	1
Kraft, Bleached (Clev)	1	1	1
Kraft, Bleached (Pgh)	5	5	5
Kraft, Natural MFNS (Clev)	1	1	1
Laminated (Clev)	8	8	8
Tissue (Pgh)	5½	5½	5½
NON-FERROUS			
Aluminum Coil (Chgo)	13	15	11
Aluminum Plate (Chgo)	14	14	9
Aluminum Sheet (LA)	4½	4½	4½
Aluminum Sheet (Chgo)	13	15	14
Brass Castings (LA)	7	7	7
Brass Rods (Chgo)	4	5½	3½
Brass Sheet (Chgo)	17	17	9
Brass Tube (Chgo)	9	9	9
Copper Fittings (LA)	3½	3½	5
Copper Mill Prod. (Pgh)	6	6	6
Copper Tube (LA)	5½	5½	5
Copper Tube (Phil)	6	6	6
Lead (Pgh)	2	2	2
Magnesium (Pgh)	4	4	2
Manganese (Clev)	1	1	1
Nickel (Clev)	1	1	1
Nickel (Pgh)	2	2	2
Silicon (Clev)	1	1	1
Tin (Pgh)	3	3	3
Wire, Specialty (LA)	8	8	5
Zinc (Pgh)	6	6	6
MISCELLANEOUS			
Bearings, Domestic (Phil)	22	22	12
Bearings, Foreign (Phil)	26	26	26
Boilers & Furnaces (Hous)	35	35	35
Compressors, Centrifugal (Hous)	48	48	52
Compressors, Reciproc. (Hous)	39	39	39
Fasteners (Chgo)	1½	1½	1½
Fasteners (LA)	7	7	4
Fasteners, Std. (Phil)	2½	2½	2
Heat Exchangers, Carbon-alloy Steel (Hous)	20	20	20
Heat Exchangers, Hi-pressure (Hous)	43	43	21
Insulation Mat'l. (LA)	7	7	7
Machined Parts (Hous)	9	9	9
Pipes & Valves (Chgo)	2	2	1
Pumps (Hous)	35	35	39
Pumps (LA)	9	9	9
Rubber, Synthetic (LA)	2	2	2
Rubber Hose (LA)	4	4	4
Tungsten Carbide Parts (Hous)	15	15	15
Valves, Cast Steel (Hous)	17	17	8
Welding Supplies (Hous)	5	5	5

BUSINESS DATATRAK

Raw material price barometer

Latest month	289.5
Month before	288.6
Year ago	251.5

Index: 1967 = 100



Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	347.00	347.00	347.00
Steel, structural shapes, Pitts., cwt.	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt.	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt.	24.40	24.40	24.40
Steel, bars, dlvd. Phila., cwt., merchant quality	17.50	17.50	17.50
Steel, bars, Pitts., cwt.	17.50	17.50	17.50
Steel, bars, C.R., Pitts., cwt.	26.00	26.00	26.00
Steel, plates, Pitts., cwt.	23.25	23.25	25.75
Steel, plates, H.R., Pitts., cwt.	23.25	23.25	25.75
Steel, sheets, C.R., Detroit, cwt.	27.10	27.10	26.15
Steel, strip, C.R., Chi., cwt.	35.30	35.30	29.05
Steel, basic wire, Pitts., cwt.	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	0.655	0.665	0.695
Antimony, in alloy, lb.	2.00	2.00	2.00
Beryllium-copper, cost ingot, lb.	5.20	5.20	4.95
Brass, red, 85%, [sheet], lb.	1.28	1.26	1.29
Brass, yellow, [sheet], lb.	1.23	1.21	1.23
Cadmium, ton lots, lb.	2.25	2.25	1.15
Copper, electrolytic, wire bars, refd., lb.	0.69	0.71	0.80
Copper sheet, over 24 in., lb.	1.37	1.35	1.38
Lead, common, N.Y., lb.	0.280	0.250	0.195
Magnesium, pig ingot, [99.8%], lb.	1.48	1.43	1.38
Mercury, 20 fl. lots, N.Y., fl.	324.00	327.00	300.00
Molybdenum Climax Oxide/bags, lb.	4.65	4.65	4.65
Nickel, electrolytic, producer, lb.	3.20	3.20	3.20
Platinum, producer, oz.	475.00	475.00	475.00
Silver, N.Y., oz.	8.67	8.73	11.09
Tin, Straights, N.Y., lb.	6.39	6.37	6.63
Zinc, Prime West, East St. Louis, lb.	0.53	0.52	0.40
Zinc, die casting alloy, No. 3, lb.	0.595	0.595	0.465
PAPER			
Uncoated book #3 offset, ton	810.00	810.00	680.00
Watermarked bond, ton	985.00	985.00	845.00
Gummed sealing tape, carton	15.85	15.45	15.42
Boxboard, mach. clay ctd. recycled sheets 80 bright, .016, ton	475.00	475.00	475.00
Wrapping paper, std. distributor cost, kraft, basis wt. 50 lb., roll	28.00	28.00	28.00
Kraft linerboard, 42 lb., unbleached, ton	320.00	320.00	270.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd.	0.297	0.297	0.246
Cotton drill, 1.85, 59", 68x49, N.Y., yd.	1.04	1.04	0.99
Cotton middling, 1", N.Y., lb.	0.782	0.799	0.704
Printcloth, 48", 80x80, N.Y., spot, yd.	0.76	0.80	0.58
Army duck, 37", 13 oz., yd.	1.90	1.90	1.63
Blended printcloth, 64", 78x54, yd.	0.76	0.75	0.67
20s combed yarns	2.16	2.16	1.72
Wool tops, N.Y., lb.	3.60	3.60	3.60

	Latest price	Previous month	Year ago
CHEMICALS			
Acrylonitrile, tanks, lb.	0.455	0.455	0.430
Ammonia, anhydrous, fertilizer, wholesale, tanks, ton	210.00	210.00	150.00
Benzene, petroleum, tanks, Houston, gal.	1.41	1.48	1.50
Caustic soda, 76% solid, drums, carlots, cwt.	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb.	0.58	0.58	0.66
Formaldehyde, USP, 37% [12% to 15% meth.], tanks, lb.	0.106	0.106	0.106
Glycerine, synthetic, tanks, lb.	0.81	0.81	0.73
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	0.45	0.45	0.48
Naphthalene, crude, tanks, lb.	0.22	0.22	0.22
Phthalic anhydride, tanks, lb.	0.305	0.305	0.275
Polyethylene resin, low density liner film grade (market price), lb.	0.415	0.415	0.320
Polypropylene, homopolymer grade (market price), lb.	0.415	0.415	0.340
Polystyrene, general purpose grade (market price) lb.	0.42	0.42	0.37
Shellac, bone dry, N.Y., lb.	1.65	1.65	1.65
Soda ash, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	0.35	0.35	0.30
Sulphur, crude, ex-terminal, Tampa, Fla., lt.	140.00	140.00	132.50
Sulphuric acid, 66%, commercial, tanks, ton	56.35	56.35	56.35
Titanium dioxide, anatase, reg., carlots lb.	0.69	0.69	0.69
Xylene tanks, gal.	1.33	1.28	1.33
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	316.25	324.40	334.45
Lumber, 2x2, pine, mbf, cl	312.40	316.05	333.15
Plywood, plyform, ¾", msf, cl	569.65	571.95	540.80
Plywood, ⅝", msf, cl	367.20	366.80	345.15
Cement, bulk, ton, tl	61.37	62.04	61.89
Sand, ton, cl	6.05	6.15	5.97
Ready-mix concrete, 3,000 psi/cu.yd., 15 cu. yd.	45.50	45.86	45.78
Crushed stone, 1½", ton, cl	7.68	7.82	7.89
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.77	0.76	0.76
Gypsum sheathing, ½"x1"x8", msf, tl	203.65	219.26	168.09
Brick, common, per thousand, tl	176.03	174.08	172.30
Asphalt paving, AC-20	165.60	164.21	156.72
Concrete sewer pipe, 12", prem. joint, per foot, cl	6.97	6.95	6.63
FUELS			
Fuel oil, No. 6 or Bunker C, Gulf., bbl.	27.50	27.00	23.30
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	31.75	31.40	29.75
Gasoline, 91 oct., reg., Los Angeles, rack, gal.	0.770	0.850	0.875
Gasoline, 94 oct., reg., Chi., tank car, gal.	0.790	0.810	0.885
Heating oil, No. 2, Chi., bulk, gal.	0.853	0.825	0.798
Heating oil, No. 2, N.Y., bulk, gal.	0.818	0.878	0.853
Heavy fuel, PS 400, Los Angeles, rack, bbl.	26.50	26.25	26.50
Jet kerosene, gal.	0.775	0.805	0.780
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	0.410	0.420	0.490
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	95.00	102.00	72.00
Steel, No. 1, hvy., dlvd. Chi., ton	84.00	84.00	69.00
Copper, No. 1, East, wholesale buy, dlvd., lb.	0.585	0.600	0.680
Copper, No. 2, East, wholesale buy,	0.495	0.510	0.600
Brass, red, East, wholesale buy, dlvd., lb.	0.545	0.560	0.640
Brass, yellow, East, wholesale buy, dlvd., lb.	0.380	0.380	0.385
Alum., old sheet/cast, E., wholesale buy, dlvd., lb.	0.420	0.475	0.390
Alum., mixed clip. E., wholesale buy, dlvd., lb.	0.450	0.505	0.420
Zinc, old, East, wholesale buy, dlvd., lb.	0.230	0.185	0.090
Lead, clean solids, East, wholesale buy, dlvd., lb.	0.145	0.145	0.110
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	35.00	32.00	25.00
Paper, old corrug. box, dlr., N.Y., ton	32.00	29.00	20.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb.	0.14	0.13	0.10
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb.	0.33	0.32	0.36

[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]

Drastic measures must be taken to ensure strongly growing revenues and slower increases in outlays. Revisions in tax and entitlement programs must be seriously considered. Otherwise, the deficit will get completely out of control—especially if the economy should turn sour.

The consequences of large and persistent deficits are widespread, affecting (1) interest rates, (2) foreign exchanges and international monetary flows, (3) debt repayment by Third World countries, and (4) many sectors of our own economy such as demand for homes, autos, and capital goods.

And it all feeds upon itself—the deficit begetting higher interest rates which, in their turn, add to the overall red ink figure.

The trade deficit

In a sense, this is connected to the budget problem. Specifically, the high interest rates engendered by the Federal shortfall are making the dollar stronger. That, in turn, tends to lower import prices and raise the price of our exports in foreign markets. Also aggravating the trade imbalance have been cheap foreign labor, relatively slow growth in foreign demands; and in a few instances lack of U.S. product quality.

Not surprisingly, our trade deficit has been growing by leaps and bounds—from $43 billion in 1982 to $69 billion last year—and to a possible $100 billion-plus figure for both 1984 and 1985. It will take time to reverse this trend, but we must do so if we are to bring world trade back into something that even remotely resembles equilibrium.

To sum up—the next 6 to 12 months don't look all that bad. But some serious corrective action is needed if we are to avoid more serious problems later on—maybe even as soon as late 1985 or early 1986.

Econometric forecasts compared

The big econometric forecasting models are making a few modifications vis-a-vis their projections made at the beginning of the year. But, by and large, the news remains good—still with no sign of either a recession or major inflationary surge.

Here's the latest *PurchasingWorld* check of four of the most prestigious proponents of the mathematical approach to forecasting—DRI, Chase Econometrics, Wharton, and Merrill Lynch. In general they suggest some fractional upgrading of 1984 GNP growth, but with some offsetting toning down of next year's overall performance.

This growth swing will probably be most pronounced in the more volatile industrial production sphere—as 1984 gains move up into the 11%-plus range (vs. the less-than-10% increase anticipated earlier). That will be followed by a drop off to only 2.7% next year (vs. the earlier 4.1% forecasted advance).

Other changes since the previous *PW* check of the econometric modelers (in the January issue of *PW*): somewhat lower unemployment rates (only 7.5% for both 1984 and 1985 are now being projected and higher-than-previously forecast interest rates.

Optimism prevails

But the inflation outlook remains pretty much the same. Thus only modest acceleration is seen for all three price yardsticks monitored in the table accompanying this article, with little indication of any big new upward spiral.

The best price showing this year, according to the model rundown, will be in the industrial wholesale sector—where a modest 3.4% advance is forseen. This figure differs a fair amount from the January '84 *PW* projection of

What the big computer models say

Real GNP (% change)	**1984**	**1985**
DRI	5.7	2.7
Chase	6.0	2.1
Wharton	6.3	2.7
Merrill Lynch	5.7	2.3
AVERAGE	**5.9**	**2.5**

Industrial production (% change)	**1984**	**1985**
DRI	10.4	3.5
Chase	11.8	0.9
Wharton	11.6	3.4
Merrill Lynch	10.7	2.8
AVERAGE	**11.1**	**2.7**

GNP price deflator (% change)	**1984**	**1985**
DRI	4.2	4.9
Chase	3.8	5.3
Wharton	4.1	5.4
Merrill Lynch	4.4	6.3
AVERAGE	**4.1**	**5.5**

Industrial producer prices (% change)	**1984**	**1985**
DRI	3.3	5.7
Chase	3.5	6.0
Wharton	3.1	6.0
Merrill Lynch	3.7	6.3
AVERAGE	**3.4**	**6.0**

Consumer prices (% change)	**1984**	**1985**
DRI	4.8	5.2
Chase	4.8	5.6
Wharton	4.7	5.6
Merrill Lynch	4.9	6.7
AVERAGE	**4.8**	**5.8**

Prime interest rate (%)	**1984**	**1985**
DRI	11.4	11.9
Chase	12.4	14.7
Wharton	12.4	14.4
Merrill Lynch	12.4	12.4
AVERAGE	**12.2**	**13.4**

Unemployment rate (%)	**1984**	**1985**
DRI	7.5	7.4
Chase	7.5	7.9
Wharton	7.6	7.3
Merrill Lynch	7.5	7.5
AVERAGE	**7.5**	**7.5**

5%. And even next year's projected 6% advance here isn't all that frightening, considering that 1985 will be the third consecutive year of economic recovery.

According to model spokesmen, optimism stems from several factors including (1) a step up in supplies at a time when demand gains will be decelerating, (2) continued modest increases in labor costs, and (3) expectations that oil quotes will remain fairly stable.

The optimism also spills over into the cost-of-living sector. Thus even with expected boosts in foods and many services, averages for 1984 and 1985 are put at 4.8% and 5.8%, respectively—little changed from forecasts made earlier this year.

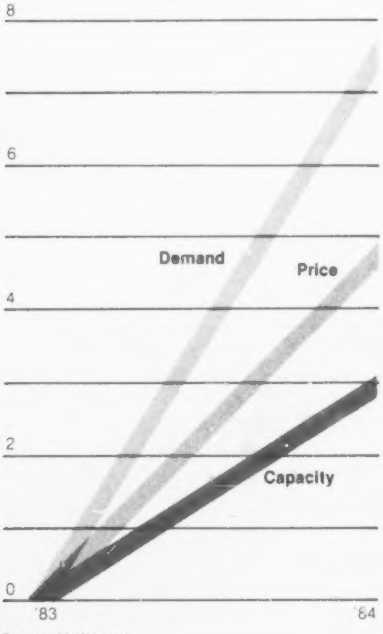
Lending credence to all these forecasts is the fact that the differences among the models in most instances are quite small—at least as far as 1984 is concerned. And even next year, there's little significant variation—except in the case of industrial production where Chase Econometrics sees less than a 1% overall advance.

To be sure, all these models use basically the same economic input. Nevertheless, the results are reassuring. There is little on the horizon that suggests the kind of imbalances that could plunge us into another boom and bust cycle.

That's not to say, of course, that everything is coming up roses. Several of the forecasts, for example, express concern about huge budget deficits and the high interest rates they are causing. But even here things are not expected to get out of hand—with only about a 1% increase in the prime rate anticipated for 1985.

Were it not for that, says one model spokesman, growth rates of 3% or even 4% would still be possible for another year or so.

The overall trend '84/83
(% increase)



Source: McGraw-Hill

View from the top

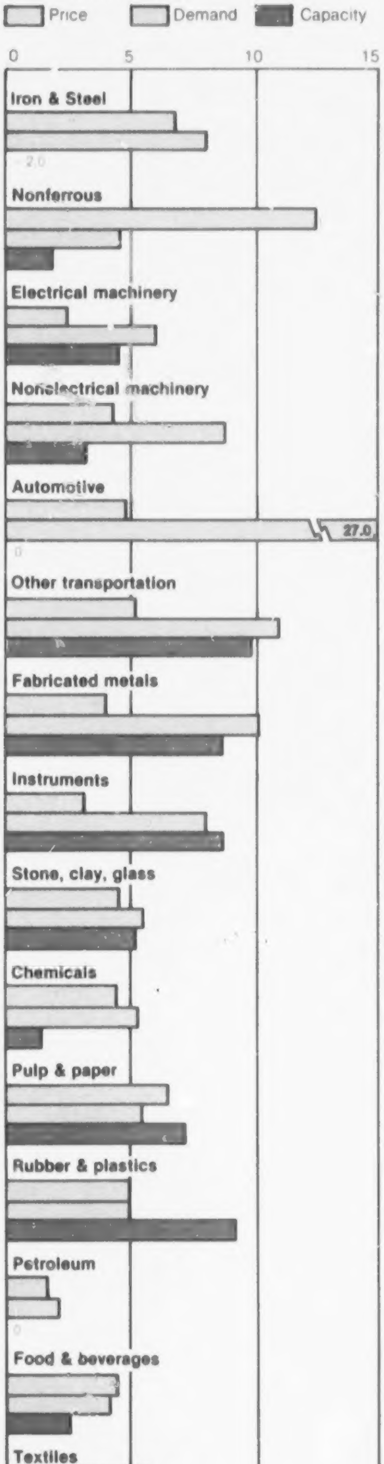
The nation's top corporate brass are still basically bullish on America.

A new McGraw-Hill survey, covering 540 leading U.S. firms, provides this insight into what the executive suite types are predicting for 1984:

- **Demand:** Factory sales with the inflation factor eliminated are expected to advance a hefty 7.4%. Durables should lead the way (up 10.2% vs. the 4.6% increase anticipated for nondurables. Biggest gains will be in automotive (27.0%), aerospace (11.0%), fabricated metals (10.1%), and nonelectric machinery (8.7%).
- **Prices:** Relatively small increases are anticipated—about 4.7% on average for durables and 4.2% for nondurables. In fact, there is only one sector that is talking in terms of double-digit increases; namely, nonferrous metals. But even with the big 12% increase expected here, this hard-pressed industry will still be a long way from recouping its big price declines of the past few years.
- **Capital spending:** A hefty 18.6% increase is projected for the year as a whole. And even if you subtract the 5.6% increase in capital goods prices that is expected, the increase comes to near 13%—a figure which is pretty much in line with the 14% estimate provided by *PW's* own Dr. Louis J. Paradiso in the companion story.
- **Capacity:** The pickup in spending, according to interviewed executives, should result in about a 3% increase in overall factory capacity this year—and perhaps a 3%-plus addition in 1985.

More important, many of these additions will be coming in areas where they are needed most. Thus pulp and paper firms (currently operating at full capacity) are predicting a 7% increase this year—and an almost as large 5% jump in 1985. Even bigger chunks of new potential are seen in the relatively tight rubber and plastics industries where 9%-plus capacity add-ons are

Industry-by-industry breakdown
(% increase '84/'83)



scheduled for both this year and next.

Equally significant is the promise of more efficient operations. A hefty 32% of overall capital outlays this year is being earmarked for replacement and modernization, up quite a bit from last year's 2% figure. And next year U.S. industry is talking in terms of an even bigger jump–to something near 43%. Indeed, zero in on a few industries such as automotive or steel and the percentage of the capital dollars going for replacement and modernization runs to more than 90%.

Perhaps the most encouraging sign on the supply front is the continuing upward revision in expected capital spending totals. Last fall, firms responding to a similar survey were budgeting only a 9.4% increase for the current year. By winter, the figure had risen to 16.9%. And now another upward ratchet has brought the increase up to 18.6%.

Reasons for this aren't all that hard to find. Sales and cash flow have surged since the recovery—giving companies both the confidence and the wherewithall to invest. Adding fuel to the fire has been foreign competition which is giving firms still more incentive to invest.

The increasing likelihood of improved revenues from higher prices could be another factor behind the upgraded investment decisions. As noted earlier, the average manufacturer is now talking in terms of a 4.5% increase in price. Combine this with an even larger 7.4% anticipated jump in the physical volume of sales—and it suggests that dollar sales could be up by as much as 12%.

On the other hand, the price hikes can be a two-edged sword impacting also on the cost of the new capital investment. The average firm queried feels that costs of plant and equipment will be up over 5% this year. While hardly earthshaking, it does represent a significant change from last year when Commerce Department figures suggested that these costs actually declined a percentage point or two.

Buyers are still optimistic

The nation's industrial purchasing executives are pretty much in agreement with everyone else these days: Things still look pretty good. Indeed, two new buyer surveys suggest that PM's may even be a shade more optimistic than corporate leaders, business analysts and the big econometric models.

Few, for example, seem very much concerned with near-term growth. Thus members of the prestigious N.A.P.M. Business Survey Committee, by a margin of four to one, expect the second half of 1984 to be better than the first half. And the optimism extends beyond that—into early 1985 when nearly one out of three Committee members expects still further improvement.

There is no really big sweat on the price front either, say these same purchasing executives. Specifically, while 90% are reconciled to some acceleration, the vast majority feels the advances will be moderate (86% to be exact) and selective (67%).

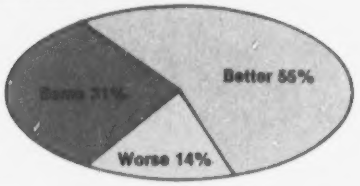
Purchasing World's own midyear outlook survey of purchasing managers tells much the same story. Asked to estimate their own firm's growth this year, 42% of the PMs said it could be in the 10% or higher range—and only a handful anticipated a decline. The average increase is put at about 7 to 8%.

These buyers, too, feel that the second half of this year will be better than the first half. Those expecting improvement outnumbered those projecting a slowdown by a better than two-to-one margin.

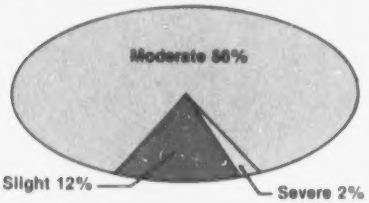
The ***PW*** survey also confirms that price boosts will remain in the tolerable range. Thus while respondents have clearly revised their estimates upward for overall 1984 procurement costs, the acceleration is relatively re-

NAPM business survey committee

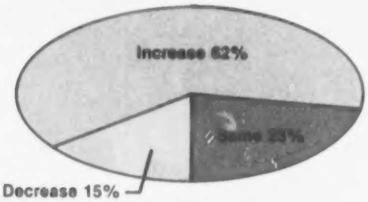
Growth
(2nd half vs. 1st half '84)



Prices
(2nd half vs. 1st half '84)

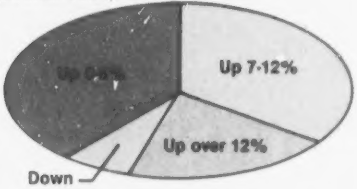


Capital outlays
(Overall 1984)

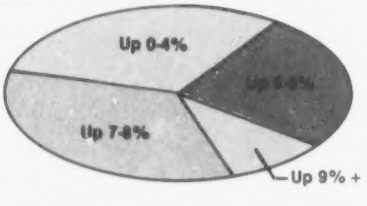


PurchasingWorld readers

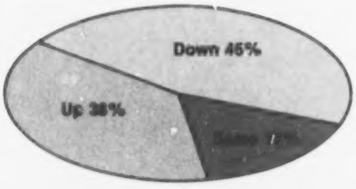
Growth
(Overall 1984)



Prices
(Overall 1984 increase)



Inventories
(2nd half 1984 trends)



strained. The new average estimated boost is put in the 6 to 7% range—just one percentage point above projections made at the beginning of this year.

Also suggestive of moderation: (1) Only 7% characterize their upward revisions as "really significant," and (2) there is still not one single respondent who is bracing for double digit increases.

Other key projections revealed by the two aforementioned purchasing manager surveys:

- **Inventories:** Respondents to the *PW* survey say they aim to keep a tight lid on stock levels despite their rosy demand projections. Indeed, those who plan on some paring actually outnumber those contemplating additions. The actual percentages: paring, 40%; adding, 37%; no change, 18%.
- **Capital spending:** Nearly two out of three of the N.A.P.M. Business Survey Committee respondents say they'll be increasing plant and equipment outlays this year, and only 15% of them anticipated reductions. With only one exception, the latest figure is the highest in more than a decade.
- **Availability:** Some tightening is suggested by the fact that (1) 39% of those answering the N.A.P.M. query report operating rates in the 90% or higher range—well over the 27% figure noted just six months earlier, and (2) *PW* readers cite some concern about leadtime stretchouts and/or shortages.

Product lines getting most mention here are semiconductors and steel. But other areas named frequently include coated paper, specialty chemicals, fasteners, grey iron castings, and beryllium copper.

These same purchasing executives also reveal a myriad of strategies for coping with the combination of continuing demand growth, somewhat higher prices, and scattered supply problems. In many cases they involve moves toward longer-term commitments, including the increasing use of blanket orders for annual requirements.

Observes one midwestern buyer, "we're taking the blanket order approach—particularly on high cost, long leadtime items like fractional horsepower motors, relays, switches, and printed circuit boards—in short wherever vendors are willing to give us a price break or at least agree to hold prices steady for an extended period of time."

Other strategies being pursued include: (1) more foreign sourcing, (2) the narrowing of the number of vendors to improve buying leverage, (3) more frequent appraisals of needs, (4) upgrading of computer-based inventory controls, (5) gradual movement toward a "just-in-time" stock system, and (6) continued questioning of every significant price boosting attempt.

As one purchasing manager sums up: "We're not going to get everything we want—as the buyer's markets of the past few years continue to disappear. But I think we have enough clout left to get through the next 6 to 12 months with a minimum of supply problems, little or no significant inventory accumulation, and quite modest price boosts."

Detailed product by product price forecast

Price moderation being projected for the next 6 to 12 months should be pretty much across the board.

Lest there be any doubt, take a look at the detailed forecasts shown in the table alongside. This data, provided by DRI Price Forecasting Service, indicates that only one of the thirty or so product lines being monitored (aluminum) should experience a double-digit advance in price over the next 12 months. And even that could be a bit overly bullish, given aluminum's current problems in maintaining recently raised list levels.

Note, too, that this basic moderation is expected to carry over into

Prices—Now through 1986
(Comparison of second quarter pricing)

Price increase (%)	1984/83	1985/84	1986/85
Raw materials, energy			
Supplies for manufacturing	3.7	7.0	6.5
Industrial chemicals	2.9	4.9	6.7
Paint materials	6.0	6.4	7.4
Middle distillate oil	12.3	4.0	6.6
Metals			
Steel (galvanized sheet and strip)	8.8	7.9	6.7
Steel foundries	3.7	8.2	6.4
Steel wire rods	2.1	6.8	8.0
Primary aluminum	8.8	13.9	5.6
Pig lead	25.0	9.7	5.4
Aluminum base scrap	57.1	4.5	4.0
Components			
Rubber belts & belting	2.7	6.4	5.5
Corrugated cartons	10.2	6.7	6.4
Hardware	2.2	6.3	5.4
Miscellaneous metal products	4.9	6.4	5.8
Ball & roller bearings	2.6	9.8	9.0
Wiring devices	4.9	8.1	8.6
Machine shop products	3.0	7.5	7.5
Capacitors	1.1	6.2	6.5
Connectors	3.3	4.4	4.5
Construction supplies			
Plastic construction products	3.1	4.0	3.9
Insulation board	5.5	4.2	4.0
Structural metal products	1.8	5.5	8.1
Structural day products	2.6	5.2	7.0
Sand, gravel, stone	4.0	7.4	11.6
Machinery			
Heating equipment	3.3	6.2	5.3
Construction machinery	2.0	7.4	7.9
Metal-cutting machine tools	2.6	9.2	8.5
Material-handling equipment	1.5	5.7	6.3
Mining machinery	0.9	6.5	5.4

1986—with almost all increases for the 12-month period ending the second quarter 1986 also falling into the single-digit range.

One reason for this is that, while wage rates are expected to accelerate a bit, pay increases will remain in the tolerable range: 4.2% this year, 5.9% over the following year, and 6.4% in 1986.

Another restraining factor is the projected slowdown in economic growth. DRI sees only a 2.5% increase in real consumption next year and an even smaller 2.1% advance in 1986.

Given the above scenario, here are how a few of the more detailed projections made by the big Lexington, MA-based econometric consulting firm shape up:

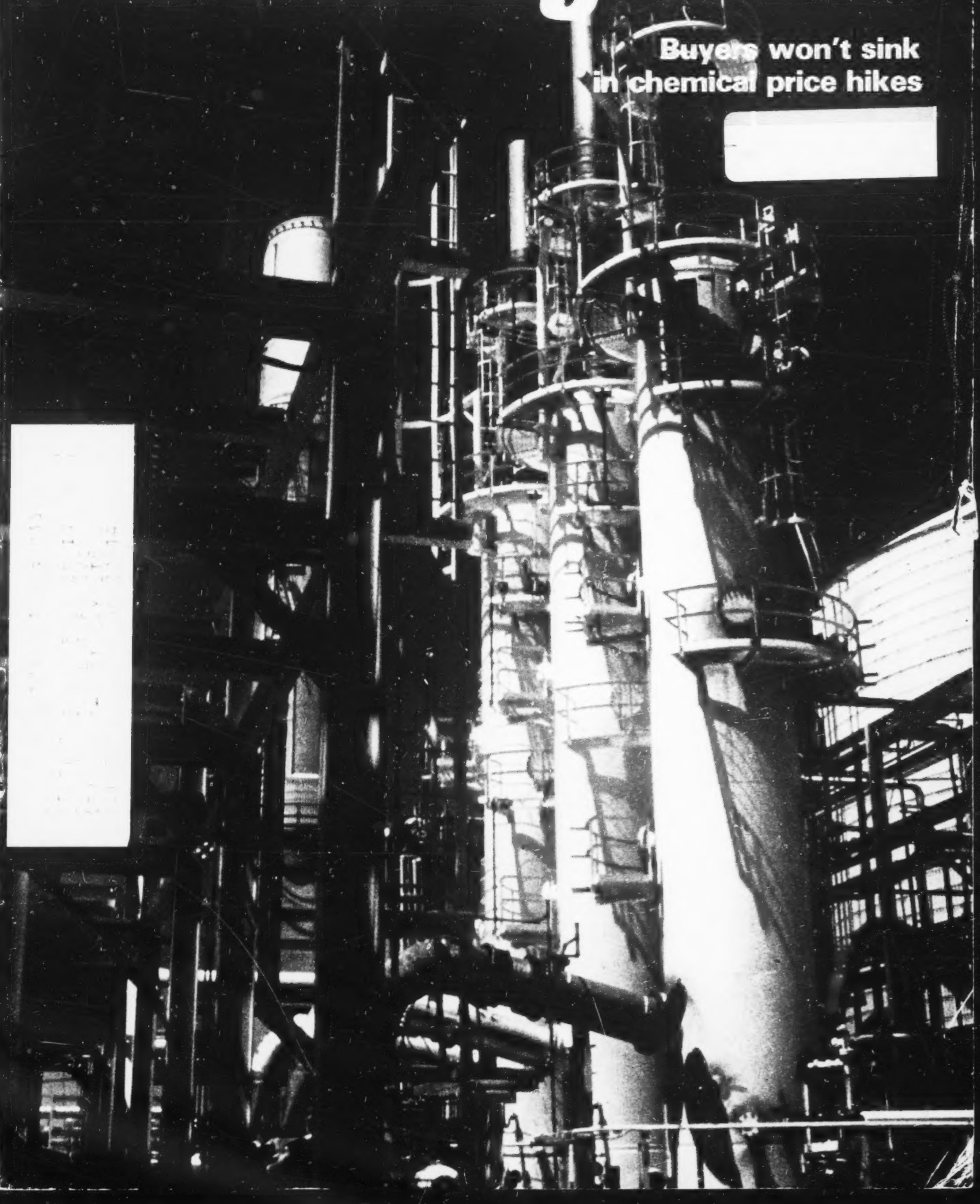
- **Metal components:** Hardware and industrial fastener prices are expected to move up 3.0% and 3.1%, respectively this year—with the restraint traceable to extremely competitive markets. After 1984, input cost increases, a declining U.S. dollar, and the effects of another year of demand gains should combine to validate more sizeable annual price hikes: 5.6% for hardware and 7.0% for industrial fasteners.
- **Chemicals:** Ample capacity and relatively small increases in feedstock costs will hold down the price advance. Specifically, the producer price index of industrial chemicals is projected to rise at a compound annual rate of 5.9% over the three-year period ending fourth quarter 1986.
- **Electronic components:** Strong demand here has resulted in a tightening of supplies in many areas. However, price response for some of these may not be as strong as might be expected because of rapidly changing cost structures and the highly competitive nature of the industry. Note from the table, for example, that capacitors and connectors will be increasing at only 6.2% and 4.4% rates, respectively over the next 12 months—with virtually no further acceleration anticipated over the following year.
- **Machinery:** Restraint is also suggested for most of the categories being monitored here. The one exception will be the fairly strong acceleration in the previously depressed machine tool segment—with metal cutting types expected to show average annual increases of nearly 9% over the next two years.
- **Energy:** Petroleum product tags over the near term are expected to mirror the crude oil price trend—with only about a 2.8% compound annual rate of increase anticipated for the three-year period ending fourth quarter 1986. That restraint is also spotlighted in the table which shows that distillates are expected to rise by only about 4% over the next 12 months. DRI projects that overall energy prices for the 1984-1986 period will increase at a compound annual rate of less than 5%.
- **Steel:** Producers are already rolling back discounts and are negotiating shipping and storage terms. But such moves are not always fully reflected in the official steel price index. Even so, this price yardstick is expected to move up 5.2% this year, 6.7% in 1985, and 7.1% in 1986. For foundry and forge shop products, the corresponding annual increase rates are 3.6%, 7.4%, and 7.4%.
- **Nonferrous metals:** Lump all these metals together and you can probably figure on price index increases of 6.2% in 1984, 10.2% in 1985, and 7.7% in 1986. A focus on aluminum ingot shows comparable increases at 9.1% this year, 10.7% in 1985, and a 7.3% gain in 1986. The three yearly projections for price increases in zinc die casting alloy are a whopping 18.3% this year, 7.1% in 1985, and 5.7% over 1986. Copper prices are expected to bounce back from today's extremely depressed price levels, with increases over the next few years to average about 10% annually. ***PW***

Don't forget to try your own hand at gazing into the crystal ball, and enter ***PurchasingWorld's*** *annual Crystal Ball forecasting competition. Just look for a copy of the form in June or July PW, fill out completely, and mail it to us. Test your forecasting skills against other purchasing pros and the actual performance of the 1984 economy and win a valuable prize.*

AUG/1984

PurchasingWorld

Buyers won't sink in chemical price hikes



PURCHASINGWORLD VOL 28 NO 8 AUGUST 1984

PurchasingWorld Helping you manage the business of buying

Vol. 28, No. 8-August 1984

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36* Closer ties to bind buyers and metal service centers
Metals service centers are going to be working harder for their customers in the future as they offer more value adding services. It's all part of a trend in the marketplace that is forging a new and closer relationship between the service centers and their customers.

44* Collects bid data in $200 billion purchasing market
A new electronic information service called BidNet is trying to do for state and local governments and institutional purchasers what the Commerce Business Daily does for purchasing by the federal government. Subscribers to the service receive bulletins collected daily on who is buying what with all pertinent bidding information.

48* Details how to access info filed with government
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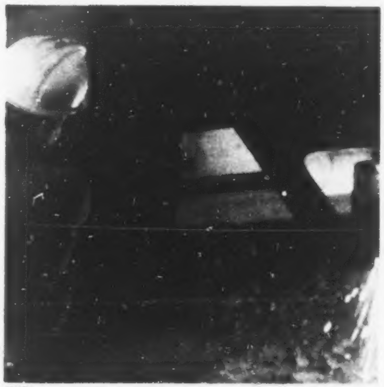
64 Chemicals buoyant, prices less so
Lingering overcapacity and continued foreign competition are keeping price increases on chemicals somewhat under the general inflation rate—not only for the balance of 1984 but for 1985 as well. That's how analysts at Wharton Econometrics see the big $190 billion plus chemical industry performing in this exclusive report for *PurchasingWorld* readers.

66 Chemical outlook is bright for buyers
Chemical manufacturers would like to raise prices but can't as excess worldwide capacity and competition have served to hold a lid on them. U.S. buyers have reason to be content as this detailed account of trends in pricing, capacity, and market factors indicates.

74* PW's quarterly report on transportation
Latest survey of transportation services indicates that it looks like clear sailing as far as freight tabs are concerned. The next 12 months won't be as easy as the last 12, but freight price increases will continue to lag behind the general inflation rate.



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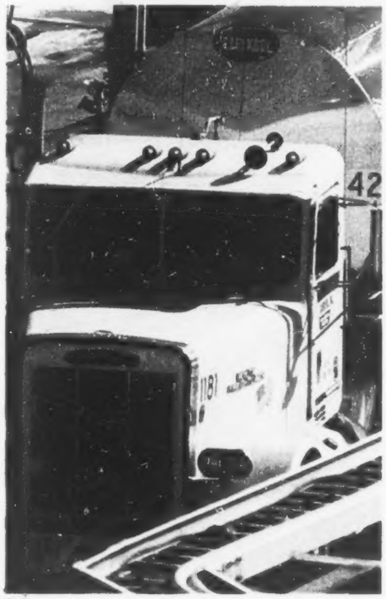

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Cover photo courtesy of Diamond Shamrock

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PurchasingWorld (USPS 472 470) is published monthly by Huebner Publications, Inc., 6521 Davis Industrial Parkway, Solon, OH 44139. Printed in USA. Subscriptions: Available without charge to qualified purchasing executives in US manufacturing companies. Available to others in the US for $46/year, Canada $56/year. Foreign subscriptions are available for 70 airmail or £40 surface mail. Sole agent for all subscriptions outside the U.S.A. and Canada is J.B. Tratsart, Ltd., 154a Greenford Road, Harrow, Middlesex HA 13QT, England. Second class postage paid at Cleveland, OH, and additional mailing offices. Circulation and business offices: 6521 Davis Industrial Parkway, Solon, OH 44139. Editorial offices: 800 S. Northwest Highway, Barrington, IL 60010. © Copyright 1984 by Huebner Publications, Inc., subsidiary of International Thomson Business Press—All rights reserved. ISSN 0093 1659.

Postmaster: Send address changes to **PurchasingWorld**, 6521 Davis Industrial Parkway, Solon, OH 44139.

PW PREDICTS

Robert S. Reichard, executive editor

Price restraint in the cards

Price averages—advancing at a far slower pace than projected just a few short months ago—continue to confound the experts

For example, after more than a year and a half of solid business recovery, industrial tags have increased only 2.6% (or less than 2% at annual rate). Even industrial raw material quotes that are normally more sensitive have remained surprisingly docile—particularly where key metals, chemicals, and plastic resins are concerned. In any case, prices of industrial raw material are still more than 10% under the peaks of early 1980 (just before the last recession hit).

Nor are there signs of any immediate acceleration. Thus, only 31% of the purchasing executives responding to the latest N.A.P.M. Business Survey Commitee query say they are now being socked with higher prices—down significantly from the 55% reading noted in April.

Actually there are some very good reasons for the price restraint. For one—capacity, with one or two exceptions—still remains ample. Then, too, labor cost increases have been quite modest—thanks to the combination of small pay boosts and still-hefty productivity gains.

But there are other inflation-restraining factors operating, too. Clearly the strong U.S. dollar (now 50% above levels prevailing a few years back) has helped—both by encouraging the in-flow of low-priced imports and restraining exports. If nothing else, this has made domestic producers who are fearful of losing market share think twice and maybe three times before attempting any big price increase.

Other inflation restraining factors include: (1) the continuing oil glut which has actually caused fractional declines in some energy tabs, (2) deregulation which has helped to foster competition in such widely diverse sectors as transportation, telecommunications, and health care, (3) the willingness of debt-plagued nations to continue producing and selling at a loss in order to earn badly needed hard currency, and (4) the outlook for another good crop year.

Finally there are today's rising interest rates which have already begun to put a crimp in construction and autos—the nation's two top consumers of industrial raw materials. Not suprisingly, prices and demand for steel, copper, aluminum, zinc, lumber, cement, and plastic resins all seem to be a little less bouyant than they were last winter and spring.

To be sure, it would still be foolhardy to expect the current price lull to last indefinitely. But the price-rise-inhibiting scenario just spelled out does seem to suggest continuing restraint. In fact, some of the recent econometric projections-calling for only about a 5-6% rate of inflation next year—are now looking increasingly realistic and attainable.

Energy outlook

It's still basically a no-sweat situation as far as energy price boosts are concerned.

Yes there could be some modest 6-7% increases over the next 6-12 months in the coal, natural gas and electricity sectors, but that would still mirror the general inflation rate anticipated over the same time span. Moreover, zero in on refined petroleum products and level or even slightly lower prices are possible.

Compare new oil forecasts to those made just three months ago (*PW*, 5/84, p. 9) and the price outlook has actually improved a bit. At that time, small hikes were anticipated for gasoline and heating oils. One reason: higher crude oil production by both OPEC and non-OPEC countries which is more than offsetting declines in the Persian Gulf area.

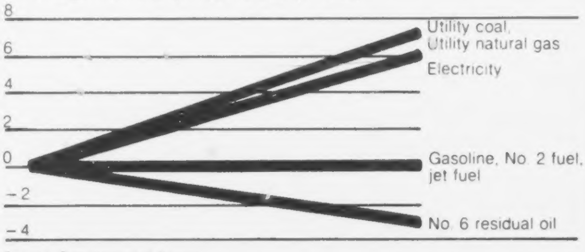
Then why the relatively large 7% increase in electricity rates projected over the next year? The Department of Energy, compiler of a new forecast, feels that higher rates will reflect higher capital costs (in the form of capacity additions and higher interest rates).

A few words are also in order on natural gas. Because decontrol in 1985 could work both ways, the DOE feels that its projection for a 7% increase is somewhat iffy. Specifically, depending on how any one of a number of variables goes, the increase could range from a low of 2% all the way up to a high of 12%.

Also worth noting: The new forecasts assume a $29/barrel price for imported oil—basically unchanged from recent levels. The projected price levels are also predicated on a relatively modest 5.5% increase in overall energy demand—with sector-by-sector consumption growth shaping up as follows: coal (8.1%), natural gas (5.4%), electricity (4.7%), and petroleum (3.0%).

Energy tags over the next 12 months

(% change from 2nd qtr 1984 to 2nd qtr 1985)



Source: Department of Energy

PW PREDICTS

Steel

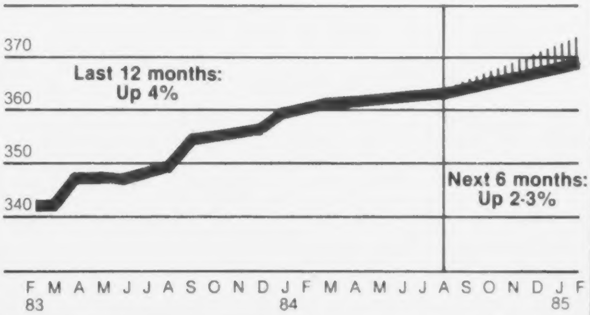
CURRENT SITUATION: Orders have slackened in recent weeks more than normally for the slow summer season. Third quarter domestic shipments won't go much above 17 million tons, down from the nearly 20 million tons shipped during the April-June period. Trends: **some reduction in leadtimes and slowing of move toward firmer prices**—with discounts of as much as 20% reported on some basic items.

DEMAND: Total 1984 shipments will be lucky to go much over 75 million tons, despite expectations of fourth quarter order pickup. Reasons for downgrading earlier estimates of 78-80 million-ton-year: some inventory reduction because of high interest rates and skyrocketing imports. Imports have captured 25% of the domestic market, up from 20.5% last year.

SUPPLY: Earlier fears of market tightness are fast disappearing—and with good reason. During the latest available month, the AISI estimates that mills were operating at only 70% of their potential. Then there are imports. Even if they slow down a bit, it's hard to see how a 20 million-ton-steel import year can be avoided—up 3 million from last year. Nor is there any danger of real tightness over the longer pull—not with **U.S. steel consumption expected to grow at only a 1.5% annual rate through the rest of the decade.**

PRICE OUTLOOK: Near term increases won't be all that easy to come by—as imports and low-domestic operating rates keep competitive pressures at a high pitch. Then, too, there are the new low-priced, long-term contracts inked by GM for the 1985 model year—something other large steel users are trying to emulate. It's hard to see any significant increases in official steel lists over the next six months. Even on the transaction level, restraint will still be the order of the day—**with 1984 prices unlikely to be up more than 5% over last year's.**

Steel mill products
(Index: 1967 = 100)



Aluminum

Cutbacks are being sparked by an ingot price decline which has knocked more than 15¢/lb off the going price since the early part of the year. True, most product tags have tended to hold up. But even here, the hectic buying pace of late 1983 and early 1984 seems to have slowed. Despite the easing, however, mills remain confident they will ship as much as 15.5 billion lb this year—a good 10% increase over 1983 levels. This, plus the recent cuts in production, should stabilize prices—and perhaps even permit some modest ingot recovery toward yearend. As for 1985—any further price boosts are likely to be quite modest as the industry manages only a very modest 4% additional demand increase.

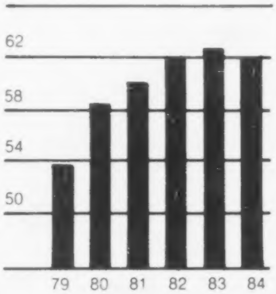
Copiers

Figure on more downward price pressure—this time in the mid-range market. Reason: Ricoh is entering the fray with base prices on new models ranging from $1,330 to $9,995. The point to keep in mind: These quotes are well under competitor Xerox's 10 Series copiers which go anywhere from $6,495 to $14,500.

Cement

Don't expect recent stability to last indefinitely. Price average by early next year could move up to nearly $65/ton—up about 5-6% from current readings. Reason: expanding demand prodded by the highway and nonresidential construction markets. Right now it looks like consumption could rise as much as 10% this year (into the 78 million ton range).

Cement
($/ton)



Butadiene

Producers are skipping third quarter boosts—and tags could remain flat through the rest of the year. Behind the softness: low priced imports. Almost 500 million lb have entered the country so far this year, with the 1984 total expected to easily exceed last year's 800 million lb. Indeed, at current levels, imports will account for one-third of all U.S. usage this year. As for the price of this imported material—some spot metal is said to be coming in as low as 27.5¢/lb, 2¢/lb under most domestic metal.

Copper

Prices remain at their lowest levels since last fall—and far under the 82¢/lb price recorded in early 1983 when the current recovery was just getting underway. True, some near-term pickup is likely as a German metalworkers' strike ends and chances of U.S. import relief improve. Nevertheless, there's little likelihood of the metal climbing to anywhere near the 85¢/lb level producers say they need to break even. The big problem isn't so much consumption (a fair-sized gain seems assured for 1984) but rather one of continued all-out production by exchange hungry Third World countries

Plastic resins

Prices have temporarily flattened out after more than a year of steady advances. To be sure, there are exceptions with PVC moving up about 2¢/lb on a transaction basis over the last month or so. But polypropylene and polystyrene have held steady and low-density polyethylene has actually declined. Nor are any big near-term increases anticipated—with average resin tags expected to move up only 1-2% a quarter over the coming fall and winter.

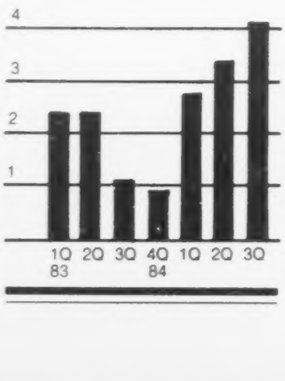
Zinc

The bloom is off the boom—with a couple of cents being shaved off producer quotes over the last month or so. This first domestic drop (after more than a year of steady increase) has also had its counterpart overseas where the European producer tag was cut by about 5%. Other signs of easiness include (1) increases in producer and LME inventories, (2) discounting by merchants, and (3) LME price declines. True, the metal isn't about to fall out of bed, but with auto and construction demand flattening out, it may be hard for prices to reach earlier highs. Indeed, another modest round of attrition is possible over the next few weeks.

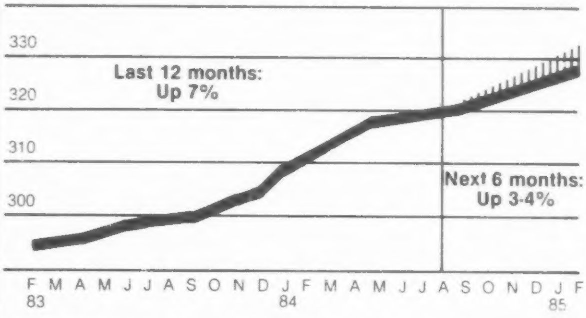
Metalworking machinery

Figure on only moderate price hikes. True, last year's small 1.8% overall increase won't be duplicated in 1984 and 1985, but a combination of foreign competition (the big auto companies continue to buy significant amounts of equipment from both Japan and Europe) and only modest demand gains will limit the 1984 and 1985 increases to only 2.5.% and 4.5% respectively, or slightly under the nation's projected general rate of inflation.

Metalworking machinery
(% increase at annual rate)



Paper and products
(Index: 1967 = 100)



CURRENT SITUATION: Bullishness is the order of the day. Coated sheet orders have been running close to 20% ahead of a year ago. The same is true of corrugated with shipments up 10% from 1983. Uncoated paper has benefited from the the booming office reprographics market. **Prices have followed suit—with averages running about 7% ahead of last summer.** Increases have been a lot heftier on specific product lines—upwards of 25% for uncoated book #3 offset, coated magazine, and uncoated groundwood papers.

DEMAND: It's looking more and more like a banner year. Right now, **overall usage could be up 5.5%.** But some lines will top that. Coated paper should be up 6.5% (on top of last year's 14% gain); uncoated free sheet could advance 6% (on top of 1983's big 11%). Linerboard demand will rise another 6-7%. But some deceleration would seem to be in the cards for 1985 when GNP gains begin to slow down—coated papers could grow only 3% and uncoated free sheet moving up 5%.

SUPPLY: It's clearly a snug situation. But everybody should get what they want—albeit leadtimes may not be all that great. Especially high 1984 operating rates are anticipated for uncoated groundwood (98%), coated papers (100%), uncoated free sheet (95%), unbleached kraft linerboard (97%), and solid bleached board (98%). **No drastic change is seen for 1985 with only minor additions to overall capacity.** Thus, barring any major business downturn, expect continued tightness.

PRICE OUTLOOK: Increases should begin to slow down a bit especially in the white paper area where it will take time to digest some of the king-sized boosts posted recently. **Another 3-4% could be added to overall paper price averages by year-end or early 1985**—if, as expected, linerboard producers boost prices another $20-$30/ton. Price creep-up seems inevitable, as supplies remain snug. Best bet for 1985: a 6-8% increase for paper and allied products.

PW PREDICTS

Office automation

It may be here, but there's still a long way to go before the majority of firms achieve their basic goal: fully automated office operations.

For one thing, there's a lot more equipment that will be needed. According to a new Administrative Management Society survey, less than half the queried offices have certain types of needed equipment. See chart.

And there are other problems as well. While 82% of the respondents say they have dictation equipment, other studies indicate that less than 10% of office workers make use of it. Similarly, while 88% indicate the presence of text-editor stations, the majority of companies admit that they're significantly under-utilized.

And even this doesn't tell the whole story—actual operating experience in more sophisticated technologies (including electronic mail, electronic filing, and teleconferencing) is reported by only 12% of the queried firms.

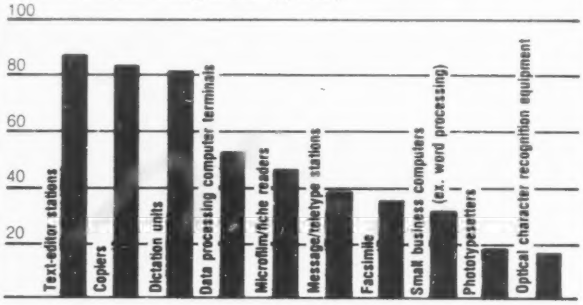
Reasons for the less-than-sensational pace: (1) rapid technological innovation which has prompted some firms to sit on the fence until things stabilize a bit; (2) the inability to measure tangible results—particularly management productivity gains; and (3) the unwillingness on the part of managers to jump on the office information systems (OIS) bandwagon.

The big stumbling blocks on the latter score: fears that using a computer lowers a manager's status (the keyboard in particular presents a major obstacle) and worries that such automation could be the first step to being replaced.

On a more optimistic note, some 69% of surveyed firms have now established centralized OIS departments to coordinate the introduction of this kind of technology. And penetration into the management sphere could well be accelerated by development of such new approaches as touch-sensitive video screens and voice-input systems that eliminate the keyboard.

Office equipment penetration ratios

(% of respondents having noted equipment)



Source: Administrative Management Society

Lead

Strikes have knocked out a good portion of total U.S. primary capacity. Result: rising prices with added impetus coming from increased East European buying. In any case the price turnaround has been quite dramatic with quotes rising from 25¢/lb a few months ago to well over 30¢/lb currently. On the other hand, secondary lead can be expected to fill in some of the shortfall—current prices are high enough to justify the reopening of some of the unutilized secondary capacity. Also worth noting: there seems to be pretty much of a consensus that prices will fall back into the mid-to-upper 20s range once work stoppages end.

Electronic equipment

Little more than relatively moderate price boosts are seen for both this year and next—despite booming demand. Best bets: average increases of 5-6% for both years. That's quite restrained given real or physical gains of 15-16% and 7-8% anticipated for 1984 and 1985. Component parts demand should do even better. Thus U.S. production of semiconductors (calibrated in current dollar terms) should be up 30-35% this year and almost 20% in 1985. Passive components won't fare all that badly either—with good-sized gains seen in such areas as connectors and printed circuit boards.

Printing machinery

Look for substantial demand gains—averaging out at nearly 10% annually in dollar terms over the next few years. So say analysts at Predicasts Inc., the Cleveland-based information service. Even if you factor in nearly 6% a year annual price boosts that still adds up to 4% real advances. Technology will play a major role, too, with many new presses being shipped with cutters, folders, and other devices as an integral or modular part of the press. Binding and finishing machines are also being included which can collate, stitch, trim, and bind the product.

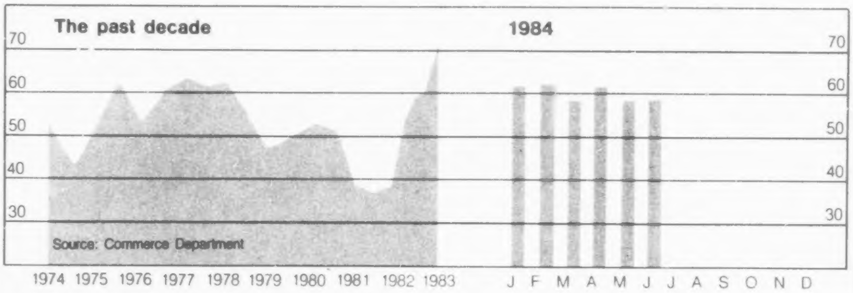
Titanium

A firming market has pushed some fabricated products up anywhere from 8% to 20% with further scattered increases (averaging out near 3%) anticipated before the end of the year. Blame it on a strong jump in demand—so strong in fact that leadtimes on some items have zoomed up into the high 16-24 week range. One consolation: Prices are still substantially below levels prevailing three years ago—just before the bottom dropped out of the market.

BUSINESS DATATRAK

NAPM business barometer

Based on five indicators (employment, inventories, new orders, production, vendor performance)



KEY ECONOMIC TRENDS

Momentum carries into summer months

While the basic trend is still upwards, no one expects a repeat of the king-sized year-to-date GNP increases—roughly at 7.5% at annual rate.

Lest there be any doubt on this score, take a look at the bellwether NAPM Business Barometer (chart above). This key yardstick of overall activity a few months down the pike, while a bit under the peaks of a few months back, is still close to nine percentage points above the neutral mark of 50. No matter how you slice it, that's a pretty good sign that both summer and early fall will remain in the plus column.

Adding to this basically bullish picture are current low inventory levels. That is not to say that holdings haven't been inching up. But so have sales.

Result: The key inventory/sales ratio (a time tested measure of overall days' supply) remains well under historical averages. Put another way, future consumption gains will have to be met by new production rather than by living off inventory fat.

On the other hand, there are signs that a slowdown in the rate of gain may not be that far off. A 13% prime rate has to have some braking effect on housing, on auto purchases, and on business spending for new plant and equipment.

The impact is already clear in the housing sector where mortgage rates at latest report were running above 14% on a fixed rate basis. That's high enough to knock millions of potential home buyers out of the market.

To be sure, the impact on autos has yet to be felt. Purchases ran at a near-record 10.8 million units (at annual rate) over the latest recorded month (center chart). But based on historical interest rate/sales relationships, the figure should begin to drop off again.

Analysts at Chase Econometrics, for example see 1985 auto sales falling to around 10.1 million (about 3% under this year's estimated level). And with good reason, for the big economic forecasting firm expects auto loan rates to inch up as high as 15% in the quarters ahead.

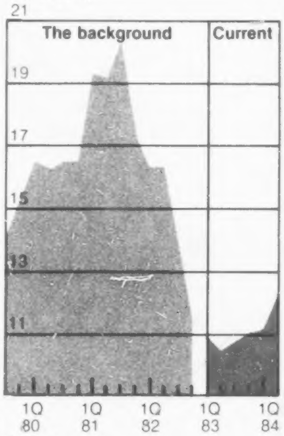
Still another growth inhibitor is the big trade deficit. Right now bets are that at least $120 billion more worth of goods will come into the country this year than will leave it in the form of exports. That spells a lot of lost jobs. (Although there is a positive offset here in that the strong import inflow helps keep inflationary pressures a lot lower than they might otherwise be).

What does it all add up to? Clearly there are increasing signs that the current rate of business advance is unsustainable. Right now the feeling among most economists is that second half gains will fall into the much more moderate 4% annual rate range.

Leading indicators

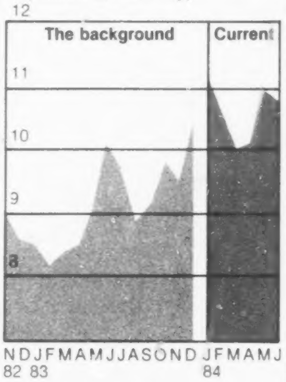
1. Prime rate

(Percent)



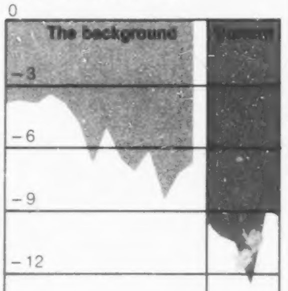
2. Auto sales

(Millions $, seas. adj.)



3. Trade deficit

(Billions $, seas. adj.)



Some tightness but capacity will be enough

Excess capacity continues to slowly dry up. Barring any unforeseen spurt in demand, however, there should be enough to go around—not only for the remainder of the year but probably into 1985 as well.

Right now, the typical U.S. factory is operating at around 82% of its potential. While significantly above the under-70% levels of late 1982 (see chart), that's still a bit under the 85% level that traditionally has been the starting point for an all-out sellers' market.

More important, there are precious few signs that the 85% reading will be reached any time soon. Reason: New capacity is beginning to come on stream at a slightly faster clip while production gains may be about to slow down a bit.

A few projections tell the story. Industry potential, according to a recent McGraw-Hill survey, should be up 3-3.5% over the next 12 months. That's not all that much under projected manufacturing output gains which, according to the latest econometric projections, suggest only about a 4.5% increase over the next year. Result: Operating rates—should still be under the 85% level a year from now.

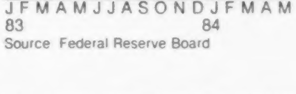
That is not to say that there won't be a few tight areas. Note, for example, that both the paper and rubber/plastics sectors are currently operating at well over 90% levels.

But it's precisely here where new capacity relief should be greatest. Thus the aforementioned McGraw-Hill survey suggests that paper and pulp potential will be up 7% this year and up nearly 5% in 1985. And in the rubber/plastics sphere, 9% plus capacity gains are seen for both 1984 and 1985.

In short, while things aren't going to be really easy, neither are they going to get much tighter.

Factory operating rates edge higher

All manufacturing
(% of rated capacity)



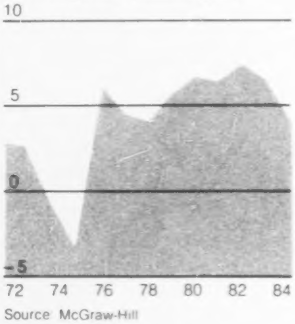
Source Federal Reserve Board

Industry-By-Industry (Current Rate %)	
Stone, clay, glass	79.2
Steel	73.8
Nonferrous	83.2
Fabric metal products	75.9
Nonelectrical machinery	75.8
Electrical machinery	92.0
Automotive	84.7
Aerospace	73.8
Instruments	79.3
Textile mill products	88.0
Paper & products	97.5
Chemicals	72.6
Petroleum products	81.6
Rubber & plastics	94.8

Top firms up R&D spending

R&D: still solidly in the plus column

The trend (in terms of real outlays)
(% change over previous year)



Source McGraw-Hill

The payoff 1987 Sales New products/Total products (%)	
Iron & steel	13.7
Nonferrous metals	9.9
Electrical machinery	17.7
Nonelectrical machinery	41.9
Autos, trucks & parts	25.0
Aerospace	27.9
Fabricated metals	11.3
Instruments	27.4
Stone, clay & glass	30.5
Chemicals	8.8
Paper & pulp	2.5
Rubber & plastic	21.8
Petroleum	2.0
Food & beverage	14.2
Textiles	22.5
All manufacturing	18.5

The nation's top industrial firms are still emphasizing research and development in their drive to upgrade products and keep overall costs down.

This year, for example, they expect to increase R&D outlays by 8.3%—or about 4% in real terms after allowing for price increases. And the trend is expected to continue after that with a similar rate of advance anticipated through 1987.

Other key R&D findings, culled from a new McGraw-Hill survey:

- **Industry-by-industry performance:** The overall 8.3% advance projected for the current year does not tell the whole story—with double digit increases expected for nonferrous metals (14%), rubber and plastics (13%), fabricated metals (13%), instruments (12%), and chemicals (12%). This certainly makes sense for instruments, rubber, and plastics because these are industries where new products and technologies are essential for survival.
- **R&D relative to sales:** Outlays will continue to constitute about 3% of the average sales dollar. But the high tech industries will be putting a lot more of their revenue into research. Leading the pack will be aerospace (22%)—followed by instruments (9%), electrical machinery (9%), non-electrical machinery (4.5%), and chemicals (4%).
- **New products:** All of the above suggests a pretty good payoff a few years down the pike in the form of new products not now on the market. All in all, some 18% of all 1987 sales will be made up of such products—with much higher percentages noted for non-electrical machinery (42%), stone, clay, and glass (31%), aerospace (28%), instruments (27%), automotive (25%), textiles (23%), and rubber and plastics (22%).
- **R&D relative to capital spending:** Ratios are sliding here—from 58% last year to 49% in 1984. But with good reason: While R&D has been maintained in recent years, capital spending has tumbled and is only now beginning to pick up. In a sense, the current capital spending increases may well represent moves by big business to reap the benefits of earlier R&D.

CURRENT PRICES

Prices moving up at snail's pace

There's more good news on the industrial price front as overall averages continue to move up at only a snail's pace—far less than might be suggested by recent GNP gains.

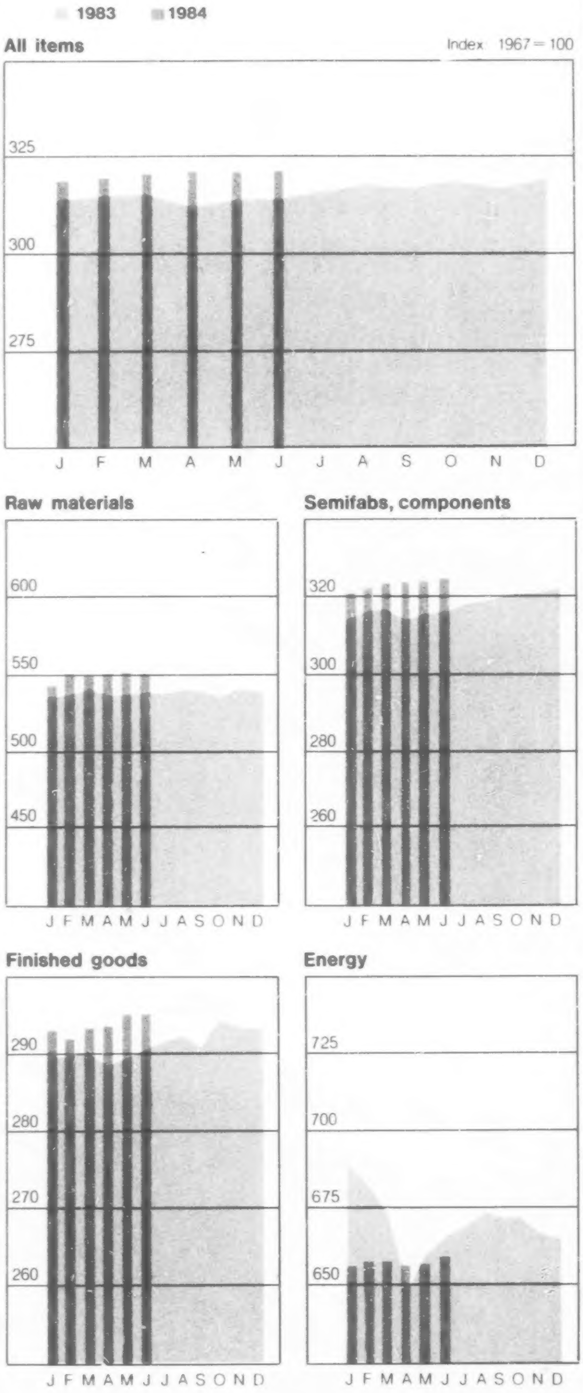
Over the past month, for example, Uncle Sam's widely monitored producer price index (ex food) increased just 0.2%, or less than 2.5% at annual rate. Nor was this a fluke. Compare current to year-ago levels and the resulting small 2.7% increase is equally impressive.

Credit part of the restraint to energy where overall averages remain virtually unchanged from month and year-ago levels. Thus while natural gas

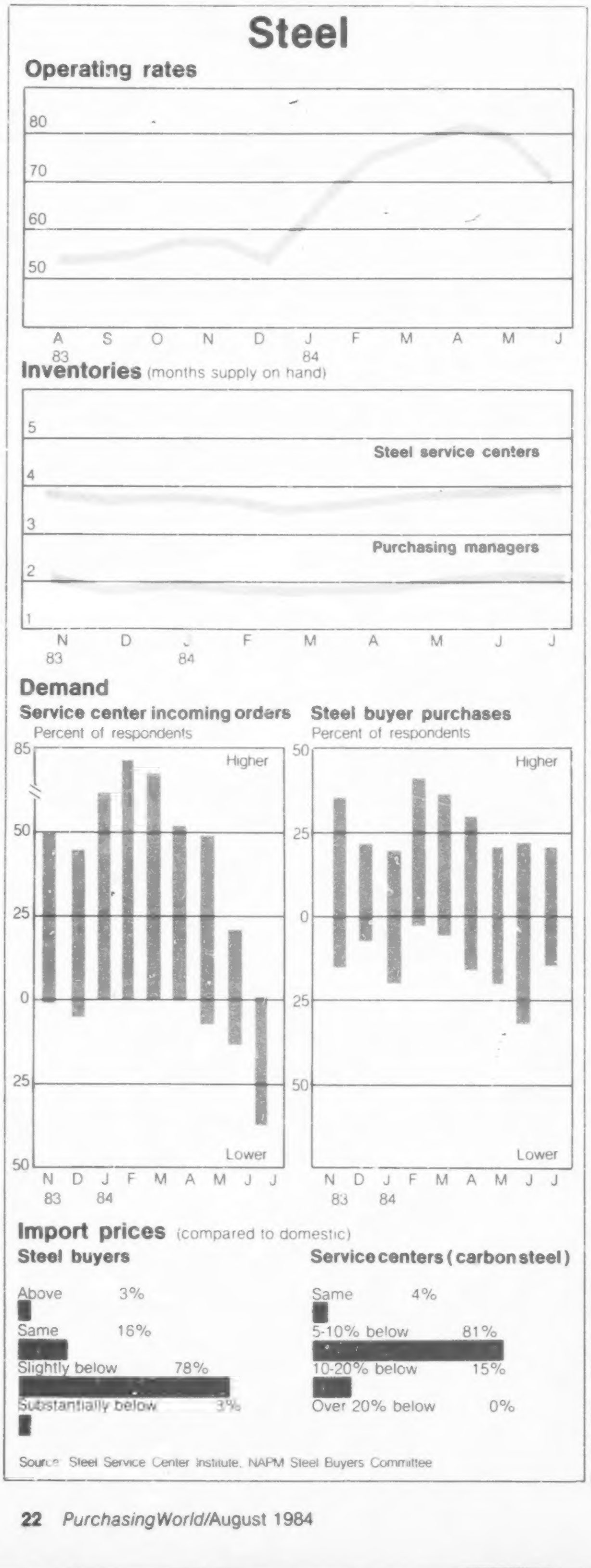
This month's breakdown

	Latest level (June)	% change from: Month ago	Year ago
Bearings	337.9	−0.9	2.2
Bolts, nuts, etc	282.2	2.6	6.1
Chemicals, inorganic	291.9	0.7	−1.2
Chemicals, organic	371.4	0.0	3.5
Concrete products	310.0	0.1	2.8
Corrugated cartons	263.0	0.2	8.5
Cutting tools, small	279.4	0.0	−0.5
Electric lamps (bulbs)	342.0	0.1	10.1
Electronic components	191.9	0.4	5.7
Fans and blowers	350.3	1.1	3.8
Foundry and forge products	360.6	0.3	2.6
Fuel oil (residual)	1115.1	0.6	11.2
Furniture, commercial	297.0	−0.2	3.5
Gasoline	584.8	−0.2	−4.5
Glass, flat	227.3	0.4	−1.0
Glass containers	366.0	1.3	4.0
Gypsum products	363.3	−0.2	31.6
Hand tools	357.0	0.2	2.3
Hand tools, power driven	221.0	−0.8	−0.6
Industrial furnaces	374.3	0.0	3.6
Integrating and measuring instruments	229.1	0.6	3.5
Internal combustion engines	344.5	−0.1	0.2
Lubricating oil	797.8	0.0	2.8
Lumber millwork	305.2	−0.1	3.5
Material handling equipment	288.7	0.3	1.3
Metal containers	348.2	0.0	3.2
Metal mill shapes (nonferrous)	326.4	0.0	6.2
Metalworking machines	333.3	0.1	1.9
Metal tanks	304.5	−0.9	−0.6
Motors and generators	340.2	0.1	5.1
Motor trucks	282.3	0.0	4.6
Office and store equipment	149.8	−3.0	2.7
Paperboard	279.1	0.8	11.9
Paper boxes and shipping containers	263.1	0.1	6.6
Paper office supplies	244.6	0.0	5.5
Paint	270.8	1.0	2.3
Plastic resins	310.8	−0.1	7.5
Precision measuring tools	253.3	0.0	2.8
Pumps and compressors	349.4	0.3	0.5
Refractories	362.9	0.0	7.7
Rubber belts and belting	352.3	2.0	7.9
Scales and balances	231.2	0.1	1.5
Steel products	362.3	0.2	4.3
Switchgear	273.5	0.3	0.6
Textiles, synthetic fibers	160.5	−0.2	3.0
Textiles, gray fabrics	154.3	0.5	5.8
Tires and tubes	243.5	−0.4	−0.1
Transformers and power regulators	227.4	0.2	1.4
Welding equipment	281.2	0.9	1.2
Wire and cable	203.4	0.2	−0.9

Industrial prices



Source: Bureau of Labor Statistics



Source: Steel Service Center Institute, NAPM Steel Buyers Committee

and electricity did edge higher over the latest 30-day period, the gains were offset by softness in gasoline, liquid petroleum, home heating oil.

Equally impressive is the price performance of the capital goods sector. True, increases were recently posted in pumps and compressors, printing machinery, fans and blowers, and integrating and measuring instruments, but these were offset by declines in motor vehicles, power-driven hand tools, photo equipment, and commercial furniture—to the extent that overall capital equipment price averages remained unchanged.

Moreover, zero in on the office equipment sector and the price trend is actually down, reflecting both technological innovations and the hot competitive battles now going on in the computer, copier, and telecommunications markets.

Semifabricated and component part prices also remain under control as increases in motor vehicle parts, fasteners, and rubber belting are partially offset by new easiness in bearings and metal tanks.

The same is true in basic raw materials—with gains in paper and industrial chemicals balanced out by lingering softness in nonferrous metals, lumber, cotton, and synthetic fiber.

STEEL SCENE

Some drop seen in steel demand

Steel demand isn't looking quite as robust as it did a few short months ago.

Specifically, some 37% of distributors queried in a new Steel Service Center Institute (SSCI) survey now say that they expect incoming orders to drop over the next three months—far outweighing the miniscule 2% who feel further gains are likely. The new findings are also in sharp contrast to just 4-5 months earlier when 75-80% of SSCI respondents were figuring on near-term order gains.

To be sure, steel buyers aren't quite as gloomy, but even here a significant change is apparent. The 21% responding to a new NAPM survey who are still betting on increased steel receipts over the next three months, for example, is again far under the 35-40% figures noted earlier this year.

One reason for the slowdown could be the recent climb in steel inventory levels. Days' supply on both the buyer and service center fronts have begun to creep up (see chart).

Current holdings are far from excessive, but with interest rates pushing carrying charges even higher, it's easy to see why there is renewed emphasis on bringing stocks down to the extremely low levels of a few months ago.

Survey respondents would certainly seem to indicate as much. It's hard to shrug off the fact that 36% of queried buyers will be attempting to bring down inventory levels over the next six months—the highest such percentage in a year.

Service centers tell much the same story. 60%

now say that they'll be opting for lower inventories. That's the highest such figure in several years—far outweighing a small 7% who feel that some further modest stocking may be in order.

One the other hand, both mill and service center executives remain basically optimistic, still talking in terms of a 75 million-ton-year.

Distributers don't seem all that concerned either. As SSCI president Andrew G. Sharkey puts it, "What our industry seems to be experiencing at this point is a plateauing effect. Shipping levels are still strong and we are not seeing a significant weakening in demand."

Today's less buoyant demand also seems to be contributing to a price as the trend toward narrower mill discounts level off, but there also seems to be plenty of infighting on the service center level—particularly on sheet in the Midwest.

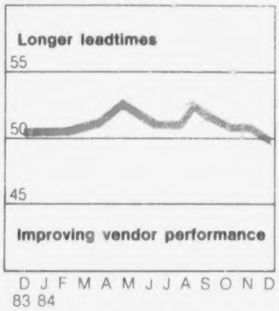
There are also plenty of import bargains around. More to the point: Some 96% of service centers say imported carbon steel is priced under comparable domestic levels with the figure rising to 100% in the case of stainless. More important, 15-20% of the respondents put the price differentials in the relatively high 10-20% range.

And once again there's steel buyer confirmation. Specifically, four out of five report that foreign prices are under comparable domestic levels—though only a surprising 3% characterize the price break as being really substantial.

Monthly procurement status report

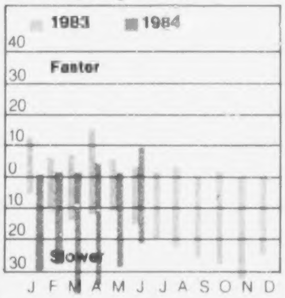
Leadtime index

A 'diffusion' index based on 158 key commodities. Above '50' indicates a tendency for leadtimes to stretch out. Below '50' suggests improving vendor performance.

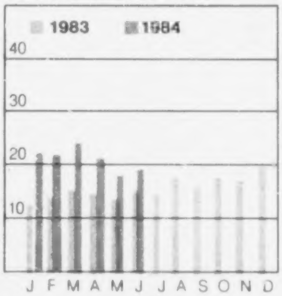


Delivery performance

Percent reporting deliveries

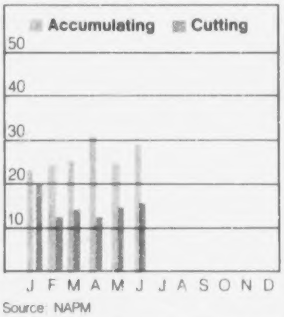


Forward commitments



Inventory strategy

Percent of respondents



Source: NAPM

PROCUREMENT STATUS

Summer brings things on time

The traditional summer slowdown is having its normal impact on leadtimes—with *Purchasing World's* exclusive index back down to the neutral 50 level. It marks the first time in more than a year that this yardstick of average delivery waits hasn't moved up.

As noted in the previous steel story, there's considerably less concern about steel now. And the same seems to be shaping up in the heretofore hard-to-locate semi-conductor sector—as producers gradually add to capacity.

One large electronic parts supplier, for example, now quotes 26 weeks for these important computer chips—down significantly from the 26-45 week range of a few months ago. And electronic component buyers generally—noting a trend back to on-time performance.

On-time performance seems to be improving in other sectors as well. Specifically, the 10% of NAPM Business Survey Committee members reporting faster deliveries this past month was the highest in a year and a half. Note too, that the number of PM's saddled with slower deliveries has been dropping steadily—from 35% in April to 28% in May and to 21% in June.

Also indicative of a less strained situation is the leveling off in vendor operating rates. As reported in this issue, the average factory utilization rate may may not even reach the 85% mark this year—a level most analysts now use as the cut-off point between a buyers' and a sellers' market.

The situation is best summed up by one Midwestern purchasing executive: "Things have pretty much stabilized as far as overall procurement and delivery performance is concerned. And if we can believe current forecasts calling for a general deceleration in the rate of business growth, I look for a relatively problem free period through fall and probably into early winter as well."

Leadtimes and availability

Chicago: Moving in a bit (with new weekly leads in parentheses) are paper (3-6), surfactants (1), c-r steel sheets (5), h-r steel sheets (3-4), steel plates (2-3), brass rods (4), and sanded plywood (1-2). But stretching somewhat are white coated/galvanized sheet (12) and copper rods (8-12). No change in most aluminum products.

Cleveland: Pretty much the status quo here—except for maintenance paints which have stretched a bit to 3-4 weeks. Other typical unchanged leads: corrugated (3), folding boxes (4), wirebound boxes (8), 2-ply fiber drums (2), polyethylene and PVC resins (3-4), cold finish aluminum (14), ferroalloys (on demand), and lumber (3).

Los Angeles: Coming into these new weekly rates are galvanized steel (12-16), grey iron castings (4-6), electromechanical devices (6-8), specialty wire (4-6), paints (3-5), stainless (14-16), custom storage tanks (6-8), and semiconductors (16-26). But out are heavy duty electric equipment (26) and computer peripherals (8).

BUSINESS DATATRAK

Houston: MRO items have turned a bit easier—with delivery now in only 2-3 weeks. Most other lines show little meaningful change, with these weekly waits noted: forgings (5-7), mill steel (4), service center steel (1), electric and electronic components (8), pumps (0-6), boilers and furnaces (31-42), and turbogenerators (26-65).

Philadelphia: Some small stretchouts in janitorial supplies (to as much as 2 weeks). And in stainless round coil from mills (12-14). But equally modest offsetting declines have hit aluminum bar, sheet and extrusions (now only 4-6), and plastic sheet—with polyethylene, polypropylene, and polystyrene types now only running at around 3-4 weeks.

Pittsburgh: Nothing much in the way of change here—with this assortment of leadtimes (in weeks) noted: coil coating paint (4), polyethylene (5), PVC (6), fabricated copper products from mill (6), steel strapping (2-3), all types of drums (1), multiwall bags (6), lumber (3-4),corrugated and folding boxes (3-4), and wirebound boxes (4-5).

Leadtimes (in weeks)

	Now	Month ago	Six months ago
STEEL			
Sheet (Phil)	9	9	9
C-R Sheet (Chgo)	5	8	8½
Plate (Phil)	10	10	10
Plate (Chgo)	2½	3½	4
Reinforced (Hous)	6	6	6
H-R Bars (Phil)	7	7	4½
H-R Bars (Chgo)	3	3	3½
Cold-Drawn Bars (Phil)	7	7	4½
Galvanized (LA)	14	16	11
Galvanized (Chgo)	6	8	7
Structurals (Chgo)	3½	3½	2½
Structurals (Hous)	17	17	15
Tubing (Phil)	7	7	7
Grey Iron Castings (LA)	5	9	6
Steel Castings (Hous)	11½	11½	11½
Forgings (Hous)	6	6	5
Pipe, Carbon (Hous)	13	13	13
ELECTRIC & ELECTRONIC			
Cables (Chgo)	8½	8½	8½
Capacitors (Chgo)	17	17	14
Circuit Breakers (Chgo)	6	6	6
Electromech. Devices (LA)	7	13	7
ICs (Linear) (Phil)	20	20	20
Motors (Phil)	15	15	21
Motors, 1000 hp & Up (Hous)	39	39	39
Printed Circuit Boards (Chgo)	20	20	10½
Relays (Chgo)	15	15	15
Resistors (Chgo)	14	14	10
Resistors, Wirebound (Phil)	10	10	9
Transformers (Chgo)	10	10	10
LUMBER			
Hardwood (Pgh)	3	3	3
Hardwood (Clev)	3½	3½	3½
Plywood (Chgo)	2	1½	2
Plywood (Phil)	1½	1½	1½
Softwood (Clev)	3	3	3
Softwood (Phil)	1/5	1/5	1/5
Softwood (Pgh)	3	3	3
Particleboard (Phil)	2½	2½	2½
CHEMICALS-PLASTICS			
Adhesives (LA)	½	½	½
Napthalene (Chgo)	2	2	2
Paint (LA)	5	5	4
Paint, Coil Coating (Pgh)	4	4	4
Paint, Maint. (Cleve)	3½	3	2½
Polyester Resin (LA)	2	2	2
Polyethylene Resin (Cleve)	3	3	2½
Polyethylene Resin (Pgh)	4	4	4
PVC Resin (Chgo)	3	3	2½
PVC Resin (Pgh)	6	6	4
Titanium Dioxide (LA)	1	1	1
PACKAGING			
Bags, Kraft (Pgh)	5	5	5
Bags, Multiwall (Clev)	9	9	9
Bags, Multiwall (Pgh)	6	6	6
Cartons, Corrugated (Cleve)	3	3	3
Cartons, Corrugated (Hous)	3	3	3
Cartons, Folding (Phil)	6½	6½	6½
Cartons, Folding (Pgh)	3½	3½	3½
Cellophane Wrap (Phil)	5	5	5
Plastic Bags (Pgh)	3½	3½	3½
Plastic Pkg. (Pgh)	3	3	3
Shrink Film (Chgo)	4	4	4
Shrink Film (Clev)	3	3	3
Drums, Fiber (Pgh)	1	1	1
Drums, Steel, Std. (Pgh)	1	1	1
Wood Pallets (Chgo)	2½	2½	2½
Wirebound Boxes (Pgh)	4½	4½	4½
Strapping (Clev)	2½	2½	2½
Strapping (Pgh)	3	3	3
PAPER			
Fiberboard (Clev)	3½	3½	3½
Glassine (Clev)	4½	4½	4½
Glassine (Pgh)	5½	5½	5½
Groundwood (Clev)	4½	4½	4½
Groundwood (Pgh)	7	7	7
Kraft (Clev)	1	1	1
Kraft, Bleached (Clev)	1	1	1
Kraft, Bleached (Pgh)	5	5	5
Kraft, Natural MFNS (Clev)	1	1	1
Laminated (Clev)	8	8	8
Tissue (Pgh)	5½	5½	5½
NON-FERROUS			
Aluminum Coil (Chgo)	13	13	11
Aluminum Plate (Chgo)	14	14	9
Aluminum Sheet (LA)	4½	4½	4½
Aluminum Sheet (Chgo)	13	13	14
Brass Castings (LA)	7	7	7
Brass Rods (Chgo)	4	4	3½
Brass Sheet (Chgo)	17	17	9
Brass Tube (Chgo)	9	9	9
Copper Fittings (LA)	3½	3½	5½
Copper Mill Prod. (Pgh)	6	6	6
Copper Tube (LA)	5½	5½	5½
Copper Tube (Phil)	6	6	6
Lead (Pgh)	2	2	2
Magnesium (Pgh)	4	4	6
Manganese (Clev)	1	1	1
Nickel (Clev)	1	1	1
Nickel (Pgh)	2	2	2
Silicon (Clev)	1	1	1
Tin (Pgh)	3	3	3
Wire, Specialty (LA)	5	8	5
Zinc (Pgh)	6	6	6
MISCELLANEOUS			
Bearings, Domestic (Phil)	22	22	12
Bearings, Foreign (Phil)	26	26	26
Boilers & Furnaces (Hous)	35	35	35
Compressors, Centrifugal (Hous)	48	48	52
Compressors, Reciproc. (Hous)	39	39	43
Fasteners (Chgo)	1½	1½	1½
Fasteners (LA)	7	7	4
Fasteners, Std. (Phil)	2½	2½	2
Heat Exchangers, Carbon-alloy Steel (Hous)	20	20	20
Heat Exchangers, Hi-pressure (Hous)	43	43	21
Insulation Mat'l. (LA)	7	7	7
Machined Parts (Hous)	9	9	9
Pipes & Valves (Chgo)	2	2	2
Pumps (Hous)	35	35	39
Pumps (LA)	9	9	9
Rubber, Synthetic (LA)	2	2	2
Rubber Hose (LA)	4	4	4
Tungsten Carbide Parts (Hous)	15	15	15
Valves, Cast Steel (Hous)	17	17	6½
Welding Supplies (Hous)	5	5	5

BUSINESS DATATRAK

Raw material price barometer

Latest month	286.5
Month before	289.5
Year ago	250.5

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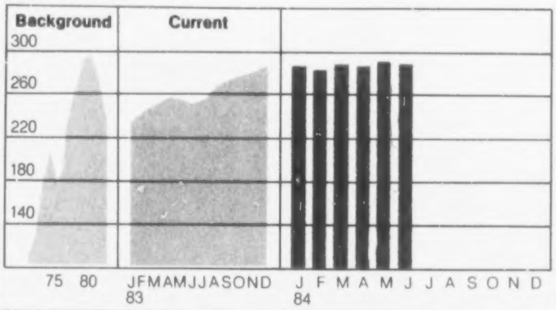


Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	367.00	347.00	347.00
Steel, structural shapes, Pitts., cwt.	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt.	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt.	24.40	24.40	24.40
Steel, bars, dlvd. Phila., cwt., merchant quality	17.50	17.50	17.50
Steel, bars, Pitts., cwt.	17.50	17.50	17.50
Steel, bars, C.R., Pitts., cwt.	26.00	26.00	26.00
Steel, plates, Pitts., cwt.	23.25	23.25	25.75
Steel, plates, H.R., Pitts., cwt.	23.25	23.25	25.75
Steel, sheets, C.R., Detroit, cwt.	27.10	27.10	26.15
Steel, strip, C.R., Chi., cwt.	35.30	35.30	29.05
Steel, basic wire, Pitts., cwt	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	0.578	0.655	0.705
Antimony, in alloy, lb.	2.00	2.00	2.00
Beryllium-copper, cost ingot, lb.	5.20	5.20	4.95
Brass, red, 85%, [sheet], lb.	1.25	1.28	1.28
Brass, yellow, [sheet], lb.	1.23	1.23	1.23
Cadmium, ton lots, lb.	2.25	2.25	1.15
Copper, electrolytic, wire bars, refd., lb.	0.65	0.69	0.78
Copper sheet, over 24 in., lb.	1.34	1.37	1.38
Lead, common, N.Y., lb.	0.300	0.280	0.200
Magnesium, pig ingot, [99.8%], lb.	1.48	1.48	1.38
Mercury, 20 fl. lots, N.Y., fl.	318.00	324.00	280.00
Molybdenum Climax Oxide/bags, lb.	4.65	4.65	4.65
Nickel, electrolytic, producer, lb.	3.20	3.20	3.20
Platinum, producer, oz.	475.00	475.00	475.00
Silver, N.Y., oz.	7.59	8.67	11.51
Tin, Straights, N.Y., lb.	6.29	6.39	6.71
Zinc, Prime West, East St. Louis, lb	0.50	0.53	0.40
Zinc, die casting alloy, No. 3, lb.	0.565	0.595	0.465
PAPER			
Uncoated book #3 offset, ton	850.00	810.00	680.00
Watermarked bond, ton	985.00	985.00	845.00
Gummed sealing tape, carton	15.85	15.45	15.42
Boxboard, mach. clay ctd. recycled sheets 80 bright, .016, ton	495.00	475.00	475.00
Wrapping paper, std. distributor cost, kraft, basis wt. 50 lb., roll	28.00	28.00	28.00
Kraft linerboard, 42 lb., unbleached, ton	320.00	320.00	270.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd.	0.329	0.297	0.236
Cotton drill, 1.85, 59", 68x49, N.Y., yd.	1.04	1.04	0.99
Cotton middling, 1", N.Y., lb.	0.715	0.782	0.714
Printcloth, 48", 80x80, N.Y., spot. yd.	0.76	0.76	0.60
Army duck, 37", 13 oz., yd.	1.91	1.90	1.63
Blended printcloth, 64", 78x54, yd.	0.760	0.760	0.695
20s combed yarns	2.16	2.16	1.72
Wool tops, N.Y., lb.	3.60	3.60	3.60
CHEMICALS			
Acrylonitrile, tanks, lb.	0.455	0.455	0.430
Ammonia, anhydrous, fertilizer, wholesale, tanks, ton	210.00	210.00	150.00
Benzene, petroleum, tanks, Houston, gal.	1.41	1.41	1.50
Caustic soda, 76% solid, drums, carlots, cwt.	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb.	0.58	0.58	0.66
Formaldehyde, USP, 37% [12% to 15% meth.], tanks, lb.	0.106	0.106	0.106
Glycerine, synthetic, tanks, lb.	0.81	0.81	0.73
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	0.54	0.45	0.48
Naphthalene, crude, tanks, lb.	0.22	0.22	0.22
Phthalic anhydride, tanks, lb.	0.305	0.305	0.275
Polyethylene resin, low density liner film grade (market price), lb.	0.400	0.415	0.380
Polypropylene, homopolymer grade (market price), lb.	0.415	0.415	0.360
Polystyrene, general purpose grade (market price) lb.	0.41	0.42	0.37
Shellac, bone dry, N.Y., lb.	1.65	1.65	1.65
Soda ash, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	0.35	0.35	0.31
Sulphur, crude, ex-terminal, Tampa, Fla., lt.	140.00	140.00	132.50
Sulphuric acid, 66%, commercial, tanks, ton	56.85	56.35	56.35
Titanium dioxide, anatase, reg., carlots lb.	0.69	0.69	0.69
Xylene tanks, gal.	1.33	1.33	1.33
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	316.20	316.25	348.50
Lumber, 2x2, pine, mbf, cl	311.15	312.40	341.60
Plywood, plyform, ¾", msf, cl	568.00	569.65	558.10
Plywood, ⅝", msf, cl	363.55	367.20	363.05
Cement, bulk, ton, tl	61.37	61.37	61.89
Sand, ton, cl	6.05	6.05	5.95
Ready-mix concrete, 3,000 psi/cu.yd., 15 cu. yd.	45.50	45.50	45.57
Crushed stone, 1½", ton, cl	7.68	7.68	7.89
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.77	0.77	0.75
Gypsum sheathing, ½"x1"x8", msf, tl	203.15	203.15	168.93
Brick, common, per thousand, tl	176.13	176.03	172.30
Asphalt paving, AC-20	165.60	165.60	155.88
Concrete sewer pipe, 12", prem. joint, per foot, cl	6.97	6.97	6.63
FUELS			
Fuel oil, No. 6 or Bunker C, Gulf., bbl.	26.15	27.50	24.75
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	31.50	31.75	31.00
Gasoline, 91 oct., reg., Los Angeles, rack, gal.	0.700	0.770	0.890
Gasoline, 94 oct., reg., Chi., tank car, gal.	0.766	0.790	0.888
Heating oil, No. 2, Chi., bulk, gal.	0.808	0.853	0.810
Heating oil, No. 2, N.Y., bulk, gal.	0.798	0.818	0.853
Heavy fuel, PS 400, Los Angeles, rack, bbl.	26.50	26.50	25.98
Jet kerosene, gal.	0.760	0.775	0.795
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	0.410	0.410	0.490
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	86.00	95.00	74.00
Steel, No. 1, hvy., dlvd., Chi., ton	78.00	84.00	68.00
Copper, No. 1, East, wholesale buy, dlvd., lb.	0.550	0.585	0.680
Copper, No. 2, East, wholesale buy,	0.460	0.495	0.605
Brass, red, East, wholesale buy, dlvd., lb.	0.510	0.545	0.640
Brass, yellow, East, wholesale buy, dlvd., lb.	0.380	0.380	0.350
Alum., old sheet/cast, E., wholesale buy, dlvd., lb.	0.395	0.425	0.385
Alum., mixed clip., E., wholesale buy, dlvd., lb.	0.420	0.450	0.415
Zinc, old, East, wholesale buy, dlvd., lb.	0.230	0.230	0.090
Lead, clean solids, East, wholesale buy, dlvd., lb.	0.180	0.145	0.110
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	35.00	35.00	25.00
Paper, old corrug. box, dlr., N.Y., ton	32.00	32.00	20.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb.	0.140	0.130	0.90
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb.	0.34	0.34	0.35

[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]

Chemicals buoyant, prices less so

Chemical markets are becoming a bit more buoyant these days, but price increases for the most part should remain quite modest. Indeed, lingering overcapacity and continued foreign competition should combine to keep increases somewhat under the general inflation rate—not only for the current year but for 1985 as well.

That, in a nutshell, is how analysts at Wharton Econometrics see developments in the big sprawling $190 billion-plus chemical industry. In a new study prepared exclusively for ***PurchasingWorld***, Wharton analysts say that the industrial output of chemical and allied products viewed as a whole should advance 7.8% this year—a rate of growth that is faster than that of the general economy. Even larger gains are projected in the paint and synthetics sectors where increases could run 19% and 13%, respectively.

All of this, of course, will continue to push up operating rates which are currently estimated to be somewhere near the 80% mark. But even next year, there should be more than enough to go around—as production gains are partially offset by continuing capacity increases in many key areas.

Coming back to prices, industrial chemicals as a group are expected to sport only a small 1.1% average advance this year. And even if you add in some of the industry's more bullish product lines such as drugs and plastics, little more than a 3.6% overall increase over 1983 is anticipated.

Going further out—1985 doesn't look all that bad for the typical chemical buyer either. Right now, the average price increase for that year looks to be just in excess of 5%—again somewhat under the nation's overall inflation rate.

Rising productivity could also be a factor contributing to these small price increases. At latest report, for example, industry efficiency was running a hefty 7% above a year earlier—with further gains expected (reflecting this year's big 16% increase in new capital spending).

But if any one factor could be singled out as a price restraining force it would have to be import competition. The strong U.S. dollar has played a key role here. But there are other factors at work too:

- Domestic producers have found it more profitable to buy basic petrochemicals abroad and then resell them in the United States.
- Latin American countries, plagued by debt, are unable to buy large amounts of chemicals from the U.S. Our exports to these nations have dropped 20% since 1981.
- Oil-rich nations are rapidly becoming better able to produce petrochemicals at a lower cost than most U.S. producers.

One has only to look at some basic petrochemical imports to see the extent of this problem. Over the first four months of this year, big increases in overseas production have been reported for such product lines as methanol, benzene, cyclohexane, and cumene.

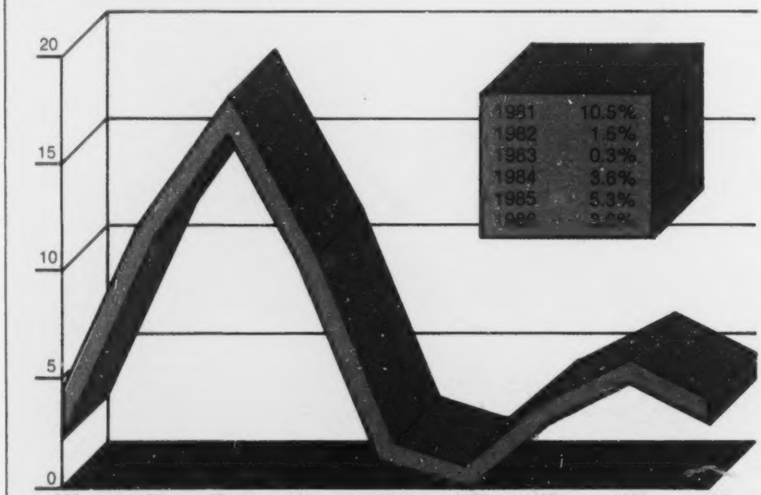
The situation is perhaps best summed up by a recent Commerce Department forecast where imports for 1984 as a whole are expected to jump 30% this year (to $12 billion) while exports will inch up only 9% (to $21.5 billion). Result: The chemical net trade surplus will come to only $9.5 billion this year—8% under 1983 and a whopping 32% under the $14 billion net balance of 1980.

Despite all of the above, the industry remains in very good shape—at least as far as overall earnings are concerned. In early 1984, for example, chemical company profits were running 60% ahead of year-earlier levels.

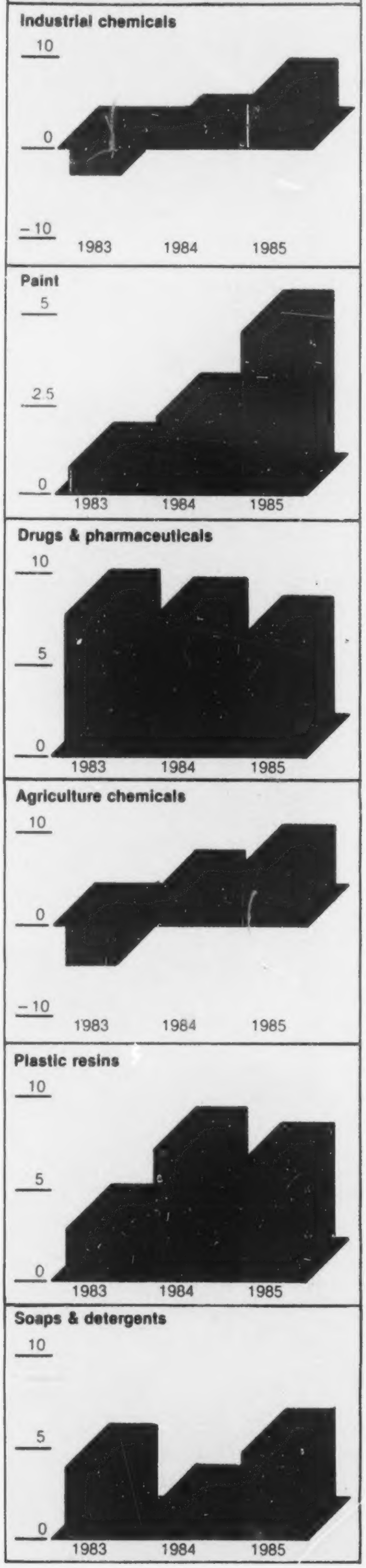
But as might be expected not all segments of the industry are faring equally as well. Here is a more detailed rundown of how some of the major sectors of this big, diverse industry are likely to fare over the next year or two:

Industrial chemicals: Production will outpace the chemical and allied product industry average—rising 10.6% this year. But as the economy begins to slow down in 1985, these demand-sensitive materials are expected to show only a small 2.3% increase. The latter, however, won't prevent some modest price acceleration in this sector—1.1% this year and 5% in 1985 (vs. a 2.8% decline

The overall trend
(% increase over previous year)



Source: Wharton Econometrics



Sector-by-sector
(Percent change)

in 1983). But by 1986, price increases should start decelerating, if what Wharton terms a "growth pause" materializes.

Paints and pigments: Last year's 2.6% increase in output reversed three consecutive years of decline. But because of over-capacity and competitive pressures, prices advanced only 0.7%. This year, however, there should be considerable acceleration on the price front—as continued recovery in the big housing and automotive markets permits quotes to rise 1.6% this year and an even more robust 4.6% in 1985. Demand, however, should begin to decelerate after this year's forecast 19.2% increase. Indeed, as orders from the auto and housing sectors slow down, only about a 3% production increase is seen for 1985.

Drugs and pharmaceuticals: Growth in this area is basically anticyclical. As such, production gains will be only slightly above the 5% increase noted last year—about 5.3% in 1984 and 5.6% over the next 12-month period. Given this relative stability, it is not surprising that there is less price variation noted here than in other segments of the industry. All in all, look for price increases of 7.7% and 6.4% for 1984 and 1985, respectively. These figures are not that much different from the 7.8% advance racked up over the last year.

Agricultural chemicals: A reduction in active farm acreage (due to PIK) has depressed farm prices and income—thus helping to drop agrichemical quotes 4.1% last year. But the stage is set for a strong recovery this year. PIK is being cut back, farm income has increased markedly, surplus grain stocks have been cut sharply, and agrichemical prices are now low relative to grain quotes. These conditions suggest a 3.7% price increase this year—with an even bigger 5.6% advance likely for 1985. All of this will be accompanied by about a 6% increase in agrichemical production this year—a sharp reversal from last year's 5.4% decline.

Synthetic materials: Buoyancy is now the order of the day here—reflecting today's solid economic recovery and the increasing penetration of plastics into the auto, packaging, and other markets. This trend is being spurred along by double-digit increases in R&D and capital outlays this year. In any event, the 13% increase in overall synthetic material output expected for 1984 should, if nothing else, permit a good sized 6.8% price increase—with an almost as large 6.2% advance forecast for 1985. But the rate of increase should begin to tail off by the third or fourth quarter of that year as demand gains begin to slow down significantly.

Soaps and detergents: This is another basically non-cyclical sector, with growth (as measured by industrial production) expected to average out at 1.9% this year and 2.6% in 1985. Similarly, no major shifts in price patterns are foreseen. Increases of 2% and 4.4% are anticipated for 1984 and 1985, respectively—pretty much in line with last year's estimated 3.9% price advance.

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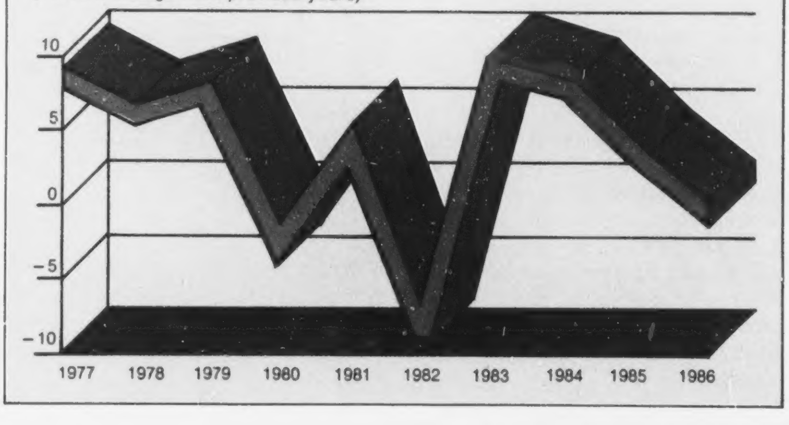

Chemical production trends
(Percent change from previous years)

Chemical outlook is bright for buyers

By Thomas F. Dillon, Senior editor

Buyers of major industrial chemicals have little to worry about in terms of supply...prices have been held down by excess capacity and worldwide competition...Chemical manufacturers would like to raise prices but can't.

Buyers of chemicals have reason to be content. Supplies exceed demand. Prices are firm and are likely to increase only slightly in the months ahead. And even more supplies are being made available overseas.

Here's what chemical industry analysts, marketing execs and product managers throughout the country are saying about the industry:

- Demand has improved over a year ago.
- Operating capacity, at 72%, is still behind the industry's historic level.
- Prices, while moving up a bit, are still well below pre-recession levels.

Because almost 70% of the industry's production goes to intermediate users (rather than end users), the industry must sell its products in many markets. Consequently the industry's health depends upon the performance of the general economy rather than on the health of a few individual segments.

Chemical manufacturers tell ***Purchasing World*** that they are anxious to raise prices, but that the threat of import competition and the slack that has not yet been taken up by the improving economy are working to keep the lid on prices.

Here's what to expect in key industry chemical markets for the foreseeable future:

Ammonia. U.S. demand for ammonia will increase from an estimated 18.9 million tons in 1984 to 19.8 million tons by 1986, according to Probe Economics Inc., the Mt. Kisco, NY-based chemical industry consultants. At the same time, the firm estimates that U.S. capacity will be decreasing from an estimated 20.1 million tons to 19.5 million tons. Still, many in the industry are predicting an oversupply in the years ahead.

Ammonia is an attractive export for the gas-rich countries of the Middle East because it is easier to ship and handle than highly volatile gas which must be pressurized and refrigerated. Ammonia production is thus one of the favorite methods of converting excess gas into a marketable and shippable product. Russia, which controls about 44% of the world's gas reserves, is also a potential supplier of ammonia. For these reasons, U.S. production of ammonia is expected to decline, but any slack will more than be made up for by imports.

Benzene. U.S. demand for benzene is running around 1.6 billion gallons annually. It is a co-product in the production of ethylene produced from heavy crude oil feedstocks such as naptha. About 50%

Photo courtesy Diamond Shamrock

of benzene produced is used to make ethylbenzene.

Both production and consumption of benzene have increased substantially this year and stocks of benzene have fallen steadily.

Carbon Dioxide. Carbon dioxide is an example of how the supply of one chemical depends on the demand for another. Carbon dioxide manufacturers can sell as much of the product as they can get their hands on. The problem, when there is one, is the availability of adequate supply. Because carbon dioxide is a byproduct, supply depends on the production of other chemicals.

In the past two years the supply of carbon dioxide was tight because the ammonia industry, one of its sources, was depressed. Ammonia is used to make fertilizer, and the demand for fertilizer was down because of the government's payment-in-kind (PIK) crop program, which was designed to discourage planting. That situation has changed, and demand for ammonia and the supply of carbon dioxide are increasing.

Carbon dioxide is primarily used as an expandable refrigerant (dry ice) for freezing and chilling. It is also used in carbonated beverage production. A more recent use is for fumigation of grain in silos.

Carbon dioxide supply is expected to meet current demand and prices should remain firm.

Chlorine. Chlorine producers have been operating at 77.5% of capacity in recent months, significantly higher than last year. The increased demand has caused recent price hikes announced by major producers.

The largest single consumption of chlorine is in the manufacture of polyvinyl chloride (PVC) which accounts for 22% of the total output. Chlorine is also used in water treatment, paper and pulp production, and in manufacturing organic and inorganic chemicals.

As Middle East sources develop facilities to produce PVC, more will be imported to the U.S. and there will be less demand for domestically produced chlorine in this market.

Ethylene. This "primary" petrochemical is used to produce several "intermediate" petrochemicals (e.g. ethylene oxide, ethylene glycol, and ethylene dichloride) which, in turn, are used to manufacture petrochemical "products" and petrochemical dependent products. U.S. demand for ethylene has been running in the 32 billion pound range in the past few years and should continue at that level through 1985.

In recent months there have been downward revisions of projected world demand because of slower growth rates in developing countries and a general slowdown in the world economy. Ethylene can be produced from heavy crude oil feedstocks such as naptha. When heavy feedstocks are used, co-products such as propylene and benzene are also produced. Ethylene can also be produced from light feedstocks, such as natural gas and natural gas liquids. Gas-rich countries in the Middle East, Canada, Mexico, Indonesia, and the Soviet Union are adding petrochemical production facilities and some are expected to compete for U.S. and other world markets.

Ethylene oxide. Ethylene oxide has three major markets. About 40% goes into ethylene glycol antifreeze, 40% into the production of

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polyester fiber, and 20% into industrial and other uses.

New ethylene glycol production facilities were announced recently by Union Carbide Corp., Danbury, CT, and PPG Industries, Pittsburgh, PA. Union Carbide started operations in a $300 million manufacturing facility in Alberta, Canada. PPG increased its ethylene glycol output by 50% when its facilities in Beaumont, TX started operating.

Probe Economics Inc. estimates that demand for ethylene oxide will be 5.9 trillion lb in 1984, 6.1 trillion lb in 1985, and 6.2 trillion lb in 1986. U.S. capacity for those years, says Probe Economics, will be about 6.9 trillion lb.

Lime. Some 89% of lime sales are for chemical and industrial use. Construction accounts for 8% and refractories account for 3%. Agricultural use is negligible.

Lime shipments in 1983 represented 60% of capacity. Prices have been increasing with an average price per ton of $41.18 in 1979, $46.89 in 1981, and $50.50 in 1983.

Demand is expected to increase at about 3% annually through 1990, according to the U.S. Bureau of Mines. Environmental regulations are increasing the demand for lime for use in desulphurizing stack gases at thermal power plants, smelters, refineries, and chemical plants and for neutralizing industrial effluent water and solid wastes.

Methanol. Worldwide overcapacity, prospects of additional supply from the Middle East, and depressed markets have cast a shadow on the previously bright outlook for methanol. During the gasoline shortage, methanol was heralded as a replacement fuel. Production was sharply increased, but the replacement fuel market developed sufficiently and dried up when gasoline became more plentiful.

Methanol is used to produce formaldehyde, and this market, too, is plagued with overcapacity. Two major markets for formaldehyde are automobiles and housing. Climbing interest rates are already curbing demand for housing and are soon expected to slow down the automotive market. Methanol's use in converting natural gas into an easily transportable product is seen as one possible growth area.

Probe Economics estimates that net methanol imports will increase from 110 million gallons in 1984 to 300 million gallons in 1986 because of additional methanol capacity coming on stream in other parts of the world.

Nitric acid. Nitric acid is made from ammonia so its price is directly related to the price of ammonia. Its major use is in the production of ammonium nitrate fertilizer.

Demand for fertilizer dropped last year as a direct result of the government's PIK program to reduce surplus farm products.

Nitrogen and oxygen. Nitrogen and oxygen are co-produced in atmospheric gas plants at a ratio of four parts nitrogen to one part oxygen. Since the raw material is unlimited, supply is limited only by production capacity. The cost of power to make the gas and the cost of transporting it are the major considerations in determining price and market area.

In the past, oxygen has been in greater demand because of its extensive, cost efficient use in steel production (BOF furnaces), and in other metalworking operations.

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mand. It is used in the electronics industry where it provides an inert atmosphere, in chemical applications, and in fertilizer production for agriculture.

Demand for oxygen is concentrated in heavy industries. Therefore, its demand tends to be cyclical, along with those industries. Nitrogen demand has been fairly constant throughout economic cycles.

Phosphoric acid. The U.S. is the only country that is basic in both phosphate rock and sulphur, both used to make phosphoric acid. The U.S. is also politically stable. For these reasons, the U.S. is a major exporter of phosphoric acid.

Supply is ample and demand is estimated at 9.4 million tons for 1984, 10 million tons in 1985 and 10.6 million tons in 1986. Capacity is projected at 11.5 million tons for 1984 and 1985 and 12 million tons for 1986.

Propylene. When ethylene is produced from heavy crude oil feedstocks such as naptha, propylene is one of the co-products. But because more ethylene is being produced from non-propylene producing lighter feedstocks, there has been a reduction in the available supply of propylene. If the above trend continues, some tightness in the supply can be expected.

Annual demand has been in balance with supply at 15 million lbs.

Sodium carbonate (soda ash). About 50% of soda ash production in the U.S. is used in the manufacture of glass. Two thirds of glass production is glass containers, and this market is being severely eroded by plastics. Some industry observers, such as Roger E. Shamel, president, Consulting Resources Corp., believe the industry's outlook is uncertain.

Soda ash is also used in chemical processes, soaps and detergents, water treatment, and pulp and paper manufacturing.

The U.S. is heavily endowed with natural soda ash. Domestic capacity far exceeds demand, and there is so much left over that U.S. producers must export it, particularly to Europe and Japan.

Sodium Hydroxide. Probe Economics Inc. predicts demand for sodium hydroxide in 1984 will be 10.2 million tons and that this demand will increase to 11.4 million tons in 1986. U.S. capacity should remain steady at 15.3 million tons.

A key element in the cost of sodium hydroxide production is the cost of power. As natural gas prices increase, suppliers who are heavily dependent on natural gas as a power source (those in the Gulf Coast states, for example), will be forced to increase their prices. Probe Economics projects a price of $109 per ton in 1984, increasing to $131 in 1985, and to $143 in 1986.

One expected result will be competition in the U.S. market from more imports from Canada. Canadian producers are in a strong competitive position because of their abundant low cost hydroelectric power supply.

The major use for caustic soda is in the manufacture of organic chemicals. This market is expected to increase 2-3% annually.

Styrene. Styrene is made from ethylene and benzene. Probe Economics estimates U.S. demand at 7.1 trillion lb in 1984, 7.2 trillion lb

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in 1985, and 7.3 trillion lb in 1986. U.S. capacity is put at 9.2 trillion lb in 1984 and at 9.4 trillion in both 1985 and 1986.

The U.S. is a net exporter of styrene, but exports are expected to fall from 1.8 trillion lb in 1984 to 0.6 trillion lb in 1985 and still lower in 1986. This projected drop is due to significant growth in overseas production capacity, particularly in the Middle East where there is an abundance of low-cost petroleum feedstocks.

Sulfuric acid. Demand for sulfuric acid has been increasing steadily in recent years and is expected to reach 38.5 million tons in 1984. Though up from 1982's 35.0 million ton level, this is still well below U.S. capacity, now estimated at 60.8 million tons.

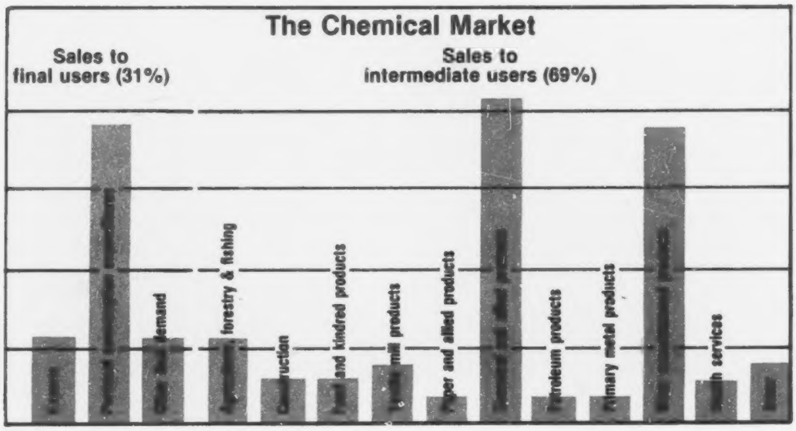
The price (f.o.b. Gulf Coast) has been declining since 1982, and in 1983 the price was $60.37 per ton. The price is expected to settle at $55.00 per ton in 1984 and then move up to $76.40 in 1986.

Price competition is being generated by I.E. DuPont de Nemours & Co., and Canadian Industries Ltd., a division of Imperial Chemicals Industries. CIL has been cutting into the U.S. market and recently purchased the National Industries sulphuric acid plant in New Jersey.

Probe Economics predicts that the demand level will reach 42.2 million tons in 1986, with supply posted at 61.2 million short tons.

Toluene. Toluene is used primarily as a gas blend to increase octane ratings. Therefore the demand for gasoline determines the demand for toluene. With increased emphasis on the removal of lead from all gasoline, the demand for toluene, weak now, is expected to grow.

Vinyl chloride monomer. VCM is used to make polyvinyl chloride plastic. Although present capacity greatly exceeds demand, Probe Economics is optimistic about the product's future and sees a fairly strong 4-4.5% growth in demand annually through 1985. Increased inroads by plastics into other markets, such as the replacement of metals in automotive applications, is one of the reasons for this optimism. **PW**



Source: U.S. Department of Commerce

PW survey: transportation

It still looks like clear sailing as far as freight tabs are concerned—despite more than 18 months of solid business recovery. So say the overwhelming number of purchasing managers responding to a new nationwide ***PurchasingWorld*** transportation survey.

To be sure, the next 12 months won't be quite as easy as the last 12, but, by and large, few see any major rate acceleration. Indeed, the overall freight boost could well continue to lag behind the inflation rate.

Factors cited for this basically hold-the-line trend: lingering overcapacity, intramodal and intermodal competitive in-fighting, relatively stable fuel costs, increased carrier productivity, and the still-substantial impact of recent deregulation moves.

In the words of one shipper whose annual shipping bill tops the $1 million mark, "We still have plenty of bargaining leverage. And if the economy slows down as expected, I think that we can continue to negotiate good deals through the rest of the year and into early 1985."

- **The recent past:** Over the last 12 months, a surprising 20% of respondents said they were actually able to lower their overall freight bills—with another 30% suggesting little or no change in their average quotes. In short, one out of every two surveyed was able to avoid an increase over the last year.

True, this is somewhat under the 69% reading recorded six months ago when a similar survey question was asked (***PW***, 2/84, p. 68). But it's still impressive given the big increase in tonnage being shipped today.

- **Expected increases:** The average overall freight rate boost for all modes over the next 12 months is put in the 4-6% range—pretty much what PMs were saying about the subsequent four quarters back in early 1984 when a similar question was asked. And while no one now expects a decline, a surprising 10% still feel they can keep tags relatively unchanged through the middle of next year.

That's not to say, of course, that everything is coming up roses. Thus three out of five respondents are reconciled to some acceleration vis-a-vis their experience over the last 12 months. But the acceleration is generally modest, with not one single purchasing executive anticipating any return to the double-digit rates of a few years back.

Moreover, not all that much difference is noted between either carload and LCL, or truckload and LTL rate increases. On the other hand, the expected overall rail increase (averaging 4-5%) runs a bit under the 5-6% estimate for the trucking sector. Transportation buyers also hope to hold most air cargo increases to 5% or less.

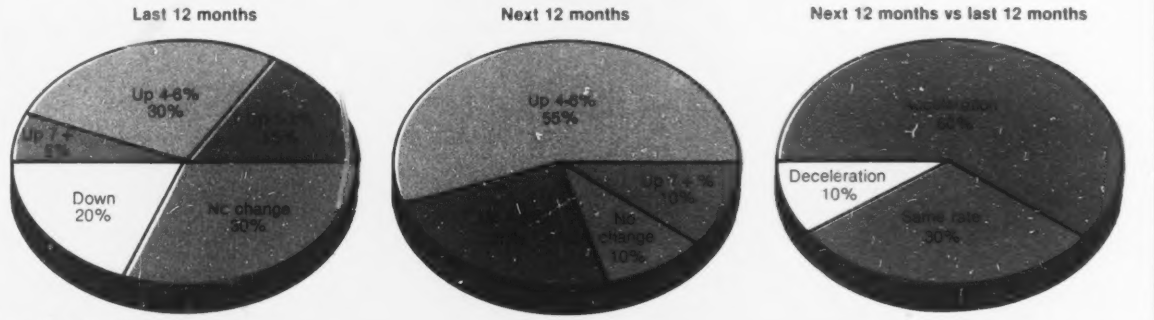
Equally encouraging are some of the savings being effected by innovative approaches. Well over one-third of the respondents, for example, have moved into contractual agreements—with the savings in a few cases running close to 50%. And these contracts cut across modal lines—with good savings noted in the trucking, railroad, and barge sectors.

There have also been more intermodal shifts—with all sorts of combinations noted. One small shipper, for instance, reports that a shift from air to expedited ground transportation helped knock $50,000 off his freight bill over the last year. And another says a change from trucks to a trailer on flat car (TOFC) approach has alone managed to knock 5% off his overall freight tab.

In some cases, non-cost considerations are behind such changes. One respondent observes that emphasis on just-in-time inventorying has necessitated moves out of rail into trucks to ensure better delivery.

Other cost-cutting strategies that seem to be paying off: (1) reduction in the number of carriers that a shipper does business with to increase bargaining leverage, (2) insistence that the buyer rather than the vendor make the carrier selection, (3) search for back-haul possibilities to cut down on overall costs, (4) increase in shipment size, and (5) development of national volume agreements. **PW**

Freight costs at a glance
(a buyer's view)



Source: PurchasingWorld

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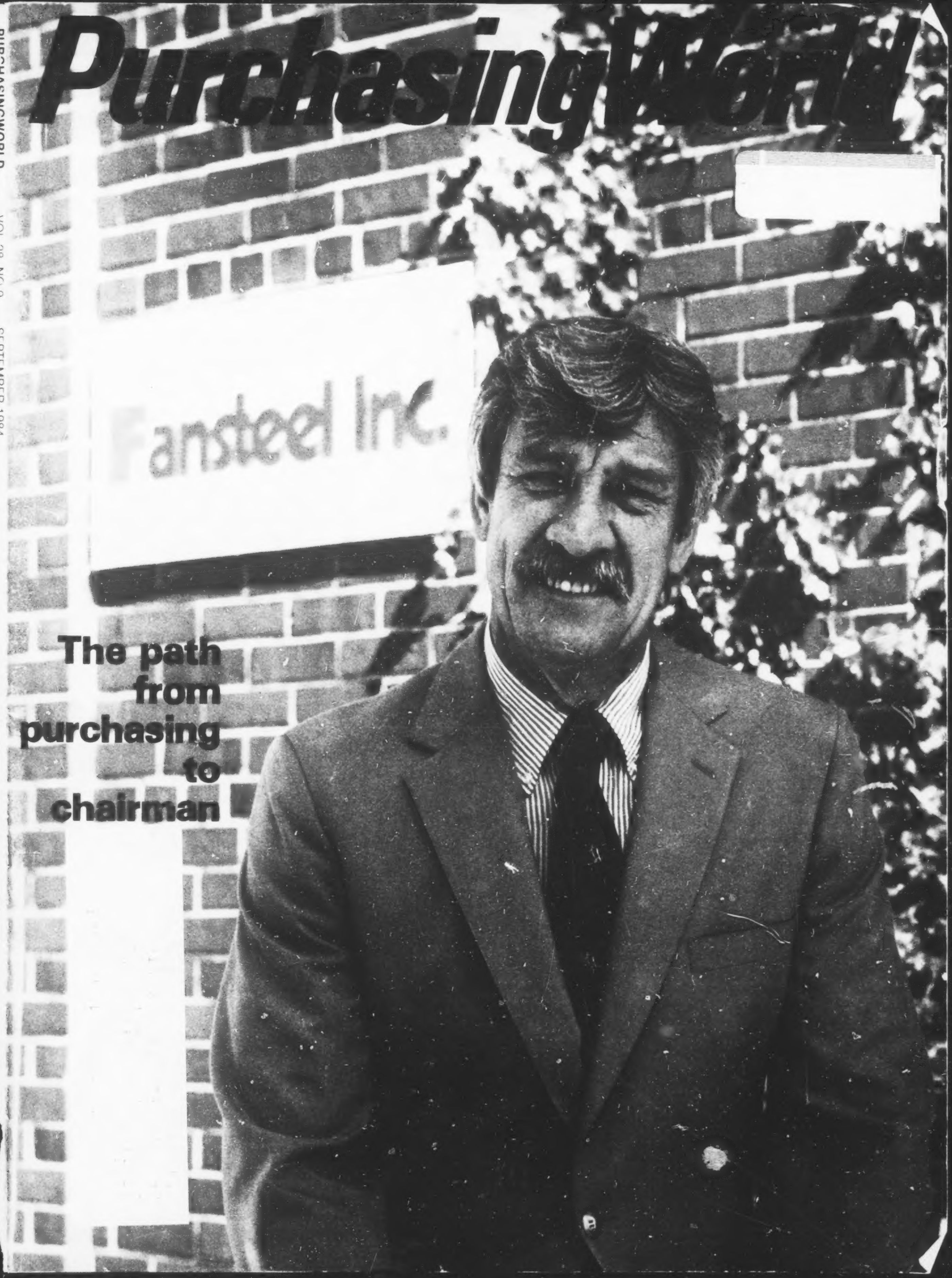
Fansteel Inc.

The path from purchasing to chairman

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Vol. 28, No. 9-September 1984

Features

49 **Cover Story: The path from purchasing to CEO**
In an exclusive interview with *PW*'s senior editor Tom Dillon, Keith R. Garrity, chairman and CEO of Fansteel Inc. and H. K. Porter Co. Inc. tells of how purchasing prepared him for his role in corporate management. His advice to purchasing people: be generalists.

54 **Non-ferrous supplies ample, prices steady into '85**
A strong dollar is only one of the factors that have made PMs lives a little brighter when buying non-ferrous metals. The reason: Price runups predicted for non-ferrous by most experts as recently as six months ago have failed to materialize. In this special report, *PurchasingWorld* provides a detailed scenario of what is likely to happen on a product-by-product basis.

70* **Cu + Al: In search of new markets**
This update of the fortunes of these two important metals catches both when competitive factors continue to challenge their supremacy in selected markets.

79* **Timken builds a world class alloy future**
A unique combination of purchasing skills between The Timken Company and Dravo Corporation is raising a greenfield alloy steel mill not far from the Canton, Ohio, headquarters of Timken. The state-of-the-art facility will raise Timken's capacity by 50% for high quality alloys steels.

82* **Tech file: blind rivets**
Everything you wanted to know about how blind rivets work, different styles and head types.

86* **Inventories show no new build up**
PMs are generally well satisfied with inventory levels, according to this most recent exclusive survey by *PurchasingWorld*.

104 **Freight bargains end but hikes moderate**
Look for increases to be in the 6.2% range for 1984 and 7% in 1985, according to Wharton Econometric Associates. They're accelerating, the firm says in this exclusive quarterly report on transportation trends for *PurchasingWorld*.

Cover photo of Keith R. Garrity, chairman and CEO of Fansteel Inc. and the H. K. Porter Co. Inc.

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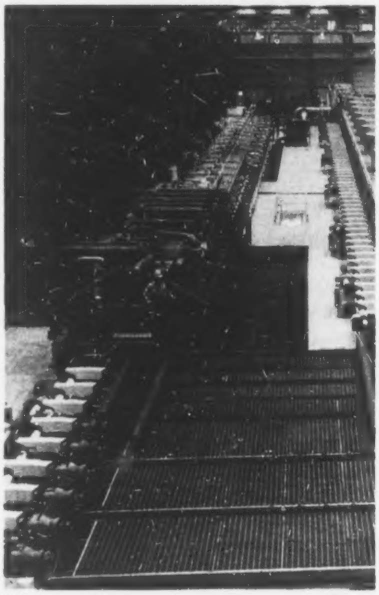

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PurchasingWorld (USPS 472 470) is published monthly by Huebner Publications, Inc., 6521 Davis Industrial Parkway, Solon, OH 44139. Printed in USA. Subscriptions: Available without charge to qualified purchasing executives in US manufacturing companies. Available to others in the US for $46/year; Canada $56/year. Foreign subscriptions are available for 70 airmail or £40 surface mail. Sole agent for all subscriptions outside the U.S.A. and Canada is J.B. Tratsart, Ltd., 154a Greenford Road, Harrow, Middlesex HA 13QT, England. Second class postage paid at Cleveland, OH, and additional mailing offices. Circulation and business offices: 6521 Davis Industrial Parkway, Solon, OH 44139. Editorial offices: 800 S. Northwest Highway, Barrington, IL 60010. ® Copyright 1984 by Huebner Publications, Inc., subsidiary of International Thomson Business Press—All rights reserved. ISSN 0093 1659.

Postmaster: Send address changes to **PurchasingWorld**, 6521 Davis Industrial Parkway, Solon, OH 44139.

PW PREDICTS

Robert S. Reichard, executive editor

Price, inflation outlook optimistic

The economy may still have its share of headaches, particularly from high interest rates and huge budget and foreign trade deficits, but the chronic problem of the past decade—inflation—seems to be much rosier

Virtually every economist who made an inflation projection earlier this year has been forced to lower it. So have government officials who now see the all-inclusive GNP price deflater rising only 4.4% this year, a half percentage point reduction from their expectations at the beginning of 1984. These same spokesmen are equally optimistic about next year, putting the average advance at under 5%.

Doubly encouraging is this moderate level inflation is occurring at a time when GNP growth rates continue to exceed expectations. GNP gains for the year ending fourth quarter '84 are now pegged near 6.5%, a full point and a half above earlier estimates.

A combination of several factors can be credited for the good news, including:

- **The absence of major market imbalances.** While some electronic and paper items are tight, the nation's overall factory operating rate, despite recent production gains, is still only in the 82% range, three percentage points under the 85% level usually regarded as the cut-off point between a buyers' and a sellers' market.
- **The positive role of imports:** There is little dispute that excess global capacity combined with the strong dollar has held down import prices with the dual effect that imports have made producers more cautious about raising their own domestic tags and have permitted the economy to expand without the usual level of bottlenecks and shortages.

Note: For every 10% appreciation of the dollar, about 1% is knocked off the inflation rate.

- **Surprising labor restraint:** With the recent recession still fresh in workers' minds, unions seem more concerned with job security than big wage settlements, thus collective bargaining pacts in the first half of '84 resulted in average wage hikes of only 2.6% in the first contract year and 2.8% annually over the life of the agreements.

With productivity gains of 3.6% on the average since the onset of the recovery, there have been little or no increases in unit labor costs, a good sign since labor accounts for about two-thirds of every sales dollar.

- **Special factors:** These include (1) expectations of agricultural bumper crops, (2) weakening oil prices, and (3) deregulation which has helped hold down transportation, telecommunication and medical costs.

All of these factors have contributed to a strong non-inflationary psychology. Similarly, there is a great deal more pressure from buyers to hold vendors in line on price hikes.

In short, it looks like a "no sweat" situation for the rest of the year and well into 1985.

Machine tools

Look for imports to continue to play a major role in machine tool procurement over the next few years. The percentage of overall market captured by foreign producers may drop from recent peaks, but only into the 28-30% range through the remainder of the 1980's

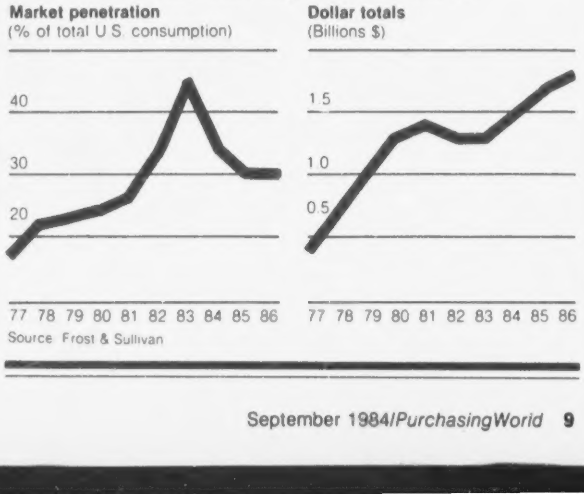
This estimate, based on a new Frost & Sullivan study, notes areas where foreign impact is likely to be greatest: CNC lathes (center 7 chucking types), CNC machining centers (with tool changers), CNC vertical lathes, automatic lathes (single/multi-spindle), surface grinders, gear hobbers, gear grinders, forging presses, and manual milling and drilling machines.

Analysts at the New York and London-based firm cite several reasons for this market penetration (led by Japan with half of all imports last year): (1) the strong U.S. dollar which accounts for lower landed prices, (2) aggressive pricing by overseas producers, and (3) the high order backlog levels of U.S. firms a few years back which permitted foreigners to get their foot in the door.

The study gives two reasons why market share is expected to stabilize over the next few years: offshore producer moves to the U.S., and more domestic producer concentration on the home market.

The report says to stem the import tide, U.S. management must be willing to invest in future market prospects by designing new machines and automating their own facilities for maximum manufacturing cost reduction. An added caveat for domestic producers: Imported machine tools have gained major acceptance from buyers and will not be displaced by a "buy American" attitude.

Machine tool imports: two views



Source: Frost & Sullivan

PW PREDICTS

Plastic resins

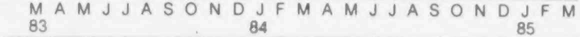
CURRENT SITUATION: Increases tended to stabilize recently in the 6.5% range. Behind this moderate advance: a combination of surplus capacity and depressed feedstock costs. Transaction quotes for key resins look like this: Low-density polyethylene (+14%), high-density polyethylene (no change), polyvinyl chloride (−8%), polypropylene (+11%), and polystyrene (no change). Also, resin discounts are ranging from 10% for LDPE and ABS to over 25% for MDPE.

DEMAND: A good year for thermoplastics on top of '83's big 13% gain. Year-to-date numbers indicate about 8% gain. Even if the GNP decelerates in '85, these resins should gain 5%. Expect mixed performance in '84 increases, as follows: PVC (9.5%), ABS (9.5%), polypropylene (8.5%), MDPE (8%), LDPE (7.5%), and polystyrene (6%). Long term is bullish as packaging and transportation expand. Example: cars will use 11 lb more plastic a decade hence.

SUPPLY: There should be enough through 1985. Projected operating rates for '84-'85, respectively, tell the story: ABS (65%, 66%), LDPE (84%, 89%), MDPE (91%, 95%), polyproylene (89%, 90%), polystyrene (63%, 65%), and PVC (75%, 78%). Minimal plant additions for HDPE in '86 could push close-to-capacity operations. Slowing expansion could push operating rates up for other resins. The addition in '85 for all thermoplastics is put at less than 2% and about 1% in '86.

PRICE OUTLOOK: Little more than a modest uptick is seen for the next six months, with official lists averaging about 2-3% above current levels by first quarter '85. It's possible market quotes could go up slightly as discounts narrow. This price pattern is anticipated for the rest of '85 as demand gains and relatively low petrochemical feedstock costs offset improved supply-demand balance. **Expect lists in a year to be about 4-5% above current levels, in line with the inflation trend.**

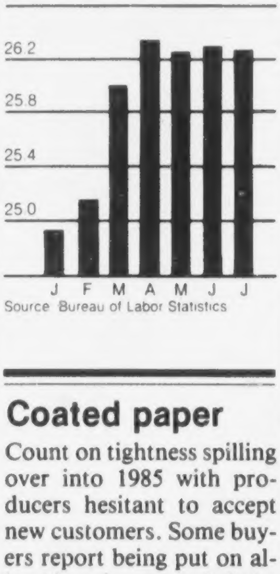
Plastic resin prices
(Index: 1967 = 100)



Corrugated

Brace for new upward price pressure following a new linerboard hike of $30/ton to bring this key raw material into the $350/ton range. Behind the boost: Booming demand with linerboard mills operating all out with little new capacity coming on stream (averaging only 1.4% annually for 1984-86, according to the American Paper Institute). Paper makers hint that this may not be the last in a series of increases since linerboard hit its $250/ton low during the recent recession. One spokesman says producers need at least $500/ton to justify new mill construction.

Corrugated prices
(Index: 1967 = 100)



Source Bureau of Labor Statistics

Coated paper

Count on tightness spilling over into 1985 with producers hesitant to accept new customers. Some buyers report being put on allocation for an indefinite period. No appreciable new capacity is likely to be available before 1986 or 1987. In the meantime, buyers will have to scrounge, filling in any holes with expensive imports running 12-20% higher than comparable domestic types. Sign of the times: huge imports running year-to-date 30% ahead of '83 levels. One encouraging note for buyers: Some discounting is now reported on uncoated white paper (cut-to-size grades).

Isocyanates

Despite rising demand (expected to be up 10-15% this year), prices remain soft because of continuing overcapacity. MDI is going in the low to mid-70's (versus a list of 91¢/lb) and TDI is being discounted to the low 80's (versus a list of 93¢/lb). There could be changes in the next few years with upward price pressures as demand comes back into balance, maybe even some tightness developing by 1986 or 1987.

Steel

The recent price recovery in oil country tubular goods (up 20-25% from last year's lows) may be running out of steam. Reasons: A combination of excess capacity, increased imports, heavy inventories, and sluggish drilling activity. The overall outlook for price hikes in other product lines also dimmed considerably as imports come in at a 24 million ton clip. Highlighting the impact of imports on prices, the Congressional Budget Office recently reported that a 15% steel import quota would boost U.S. prices about 10%, with 3% coming within the first year.

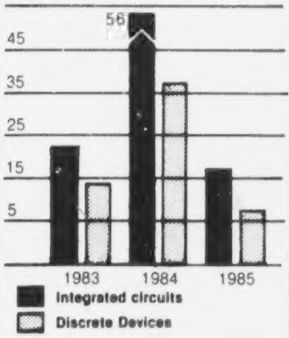
Fasteners

Price shaving is still common with substantial discounting noted on cap screws, toggle bolts, machine screws, tapping screws, rivets, and washers. Worth noting: Sellers, responding to a new industry survey, say price competition is their biggest problem. Even the U.S. official fastener price index reports latest quotes dropping more than 1% under previous months' levels, which is not complete since the government rarely captures all the discounting going on in this industry.

Semiconductors

Significant downward price pressures can't be ruled out for next year, from both Japanese and Korean manufacturers. Reason: Increasing production potential plus some slow down in demand. Next year's dollar sales are expected to be up only 15-20% for integrated circuits and only 7-8% for discrete devices, compared to this year's respective 50% and 30% advances for these items.

Domestic semiconductor sales
(current $, % change)



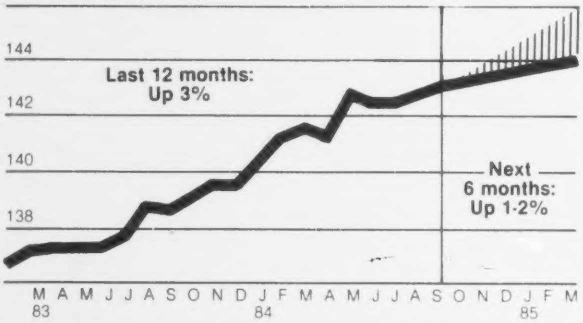
Aromatic chemicals

Benzene prices, pressured by imports, are off another 8¢/gallon, down to near $1.32/gallon contract quotes. Spot prices are even lower, with some as low as $1.29. Toluene spot quotes are even lower still, falling to under $1/gallon. Markets should turn around if oil prices stabilize in the months ahead. In the long pull, reduction in lead content of gasoline by 1986 may beef up toluene and xylene, both of which can serve as octane enhancing substitutes for lead.

Computers

There is still plenty of discounting on PCs, with shading as high as $600 and $400 reported on Apple Macintosh and IBM models, respectively. The upper end of the PC line could also be in for another round of competition with the introduction of IBM's new high powered model, dubbed the PC AT. The model will be selling in two versions, at $3,995 and $5,795, against many other multi-user systems. It could also pose

Textile mill product prices
(Index: Dec. 1975 = 100)



Textiles

CURRENT SITUATION: Markets have flattened, output is edging down the past few months, a reverse from last year's 13% domestic production gain. **Prices are following a similar pattern.** Averages have been static, running only about 3% ahead of a year earlier. Summer lull is one factor, but others such as skyrocketing imports and high interest rates are finally beginning to cap carpeting and home furnishings gains.

DEMAND: Modest increases for the year are likely, with domestic output expected to rise 3-4%. Apparel markets, rather than carpets, should lead this advance. Apparel seems off by about 10% following last year's 23% jump. Even the fabric sector has soft spots. Corduroy and denim sales are below expectations, but industrial print and oxford cloths are still moving. **Textile mill output is expected to post only about a 2% gain** next year as the rate of gain drops.

SUPPLY: Buyers should continue to have plenty of bargaining leverage. Main reason is imports of textiles and apparel are running 40% above last year, nearly a 10 billion square yard equivalent. Steps to stem imports will take time. **Also, domestic capacity is more than ample** running at 85%, six points above '83 levels. The 10% planned increase in capital spending this year is enough to add another point or so onto textile mill potential.

PRICE OUTLOOK: Little upward pressure is forecast because of the supply-demand situation, but equally important are the soft upward cost pressures. On the fiber front, for example, cotton has come down about 10¢/lb in recent months and synthetics' averages are only running about 1% ahead of last year. Unit labor costs are steady as productivity gains offset 4-5% pay hikes. **Overall '84 advance is likely to be only 4-5%,** with mill product averages likely to advance only another 1-2% by year end.

tough competition for (1) Apple computers because it incorporates many of that firm's easy-to-use features and (2) makers of some of the bigger minicomputer systems like Digital Equipment and Data General.

Commodity trends

Good news for basic commodities buyers: Prices over the next year or so aren't likely to move up much (precious metals excepted). Even with still improving demand, scattered declines are actually possible in some areas.

This according to Chemical Bank's just released *World Commodity Outlook* study. Here briefly is how they see future price changes for fourth quarter '85 versus fourth quarter '84:

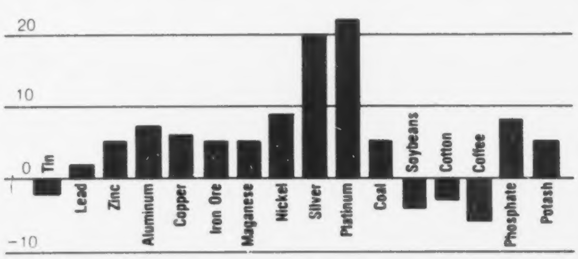
- **Base metals:** Tin (-2%), lead (+2%), zinc (+5%), aluminum (+7%), copper (+6%), iron ore (+5%), manganese (+5%), and nickel (+9%).
- **Precious metals:** Gold (+19%), silver (+20%), platinum (+22%), and palladium (+25%).
- **Energy:** Crude oil (no change), coal (+5%).
- **Agriculture and fertilizer:** Wheat (+3%), corn (no change), soybeans (-4%), cotton (-3%), sugar (+17%), coffee (-6%), cocoa (-11%), phosphate (+8%), and potash (+5%).

Zinc, aluminum and nickel look most bullish, according to the report's section on base metals. About nickel they say, for example, "...demand is being boosted by rapid expansion in stainless output and prices should be on a gently rising trend over the forecast period."

Commenting on zinc and aluminum, the bank report discounts current easiness, observing that market prospects remain sufficiently bullish to expect price gains for 1985. As for copper, the report observes that "unless further production setbacks are instituted, which seems unlikely, then prices in the second half of 1984 should be lower than last year, with prices in 1985 showing only modest appreciation."

Selected price changes

(4th qtr 1985 vs 4th qtr 1984)



Source Chemical Bank

Petroleum

Discount talk of further declines in crude oil. Reason: OPEC is starting to curtail output, with Saudi Arabia alone cutting back to 4 million barrels a day from the current 5.5 million. But some refined products such as gasoline should remain at bargain levels as consumption tails off seasonably. Look for relatively stable pump prices in the $1.16-1.18 range, some 4-5¢/gallon under May's levels.

Tall oil fatty acids

Two consecutive monthly increases have pushed prices into the 27-33¢/lb range. Quotes have been on the rise for some time with some grades commanding as much as 70% more than a year ago. Behind the runup: A combination of strong demand and rapidly dwindling producer stocks. This situation is likely to continue with consumption rising at a near 5% rate, more than twice as fast as domestic producers can raise output.

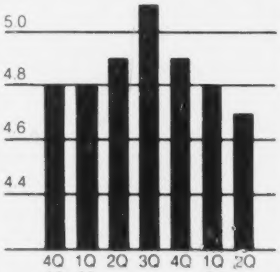
Insurance

Price wars in property and casualty rates seem to be almost over. Rates in areas such as business property and accident liability have already started to climb, averaging anywhere from 5-15% so far this year, with the actual amount depending on product line and geographical area. There could be more boosts ahead (one firm predicts a 20-30% overall boost by year end). Reason: Last year the industry lost a record $13.3 billion from policy underwriting. But rate hikes won't affect auto and home insurance where rates have been stable in recent years.

Real estate

Negative news for buyers is that industrial plant bargains should be harder to come by as vacancy rates drop to 4.7% on average, some 0.4 points under late '83 peaks. However, office vacancy rates in key cities continue to climb, reaching 13.5% at latest report, nearly two full percentage points above last year and well under the 3.5% lows of 1980. Things could change as suburban availability begins to decline from the 18%-plus levels of last year.

Plant vacancy rates (%)

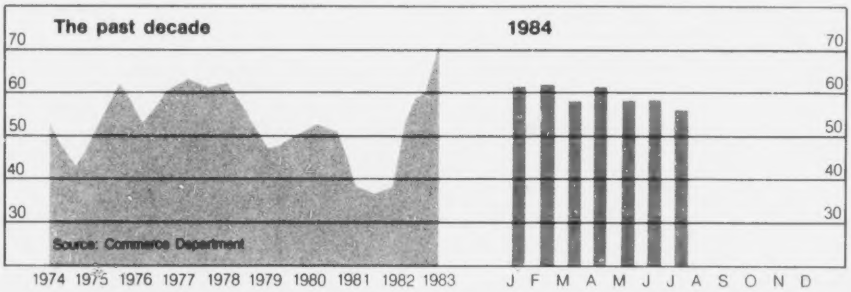


Source Coldwell-Banker

BUSINESS DATATRAK

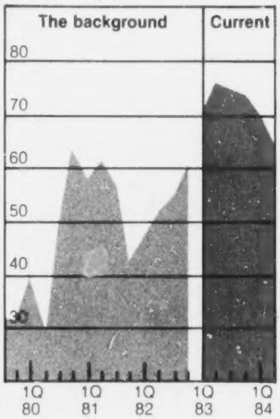
NAPM business barometer

Based on five indicators (employment, inventories, new orders, production, vendor performance)

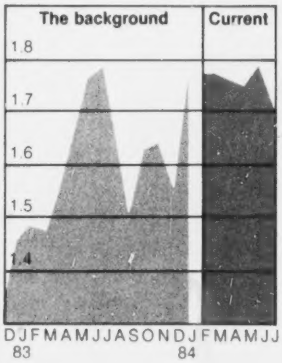


Leading indicators

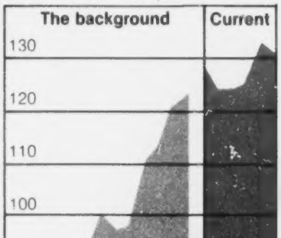
1. Business confidence
(Scale 0-100)



2. Housing permits
(Millions of units, seas. adj.)



3. Help wanted
(Index: 1967 = 100)



KEY ECONOMIC TRENDS

Outlook bullish through autumn

The upward momentum of the first few quarters of the year has carried into the traditionally slow summer months, with the upcoming fall looking almost as good.

Real GNP gains won't be as robust as the huge 8.8% gain at annual rate for the first half of the year, but that's good because it diminishes the likelihood of the economy overheating and falling into a tailspin.

Right now it's hard to see less than a 4% increase in GNP in the second half of the year—a more robust picture than anticipated a few months ago.

Leading indicators tell the story. While the NAPM business barometer has edged slightly lower—it's still well above the neutral 50 level—providing a guarantee of further gains in the the months immediately ahead.

A look at some of the key sectors of the economy support this continuing optimism. The inventory/sales ratio for all U.S. business is down near 1.32, well under the normal equilibrium level of 1.40 and marginally above the all-time low of 1.29 last September.

Also encouraging is the stock/sales ratio for purchased materials (the PM's own bailiwick). As shown in the accompanying chart, the latest figure is far under levels prevailing when pickup first began in early 1983, and well below what might be expected after nearly two years of solid business recovery.

Not even rising interest rates seem to be making much of a dent in the the recovery pattern. The public is still spending at a brisk pace and the outlook is for more of the same in the months ahead. The Michigan Survey's Index of consumer sentiment is now at 96.6 (Feb. '66 = 100), just below the record of three months ago and well above the 91.5 a year ago.

Businessmen seem equally optimistic, though figures (*see chart alongside*) are not as high as a few quarters back. Latest readings suggest corporate executives still see a rosy picture for the economy and it's showing up in the slow but steady rise in capital spending.

Construction is a pleasant surprise, with housing permits (a barometer of near-term housing activity) still running at about a 1.7 million annual rate, far above the low of 1.3 million at the end of '82.

The employment situation also remains bullish. In July jobs on non-farm payrolls jumped more than 300,000, with gains across a wide range of industries. It is a continuation of an extended trend with jobs rising at a 4.4% annual rate since the beginning of the year.

If help wanted figures are any indication, this trend will continue. The Conference Board's index of job advertising is at new peak (*see last chart*), some 40% above last year at this time.

However, higher interest rates and rising imports, which are now eating into U.S. production, seem to indicate some deceleration.

But any slowdown is expected to be moderate. All indications are GNP will remain solidly in the plus column for the remainder of the year and well into 1985.

Pollution control

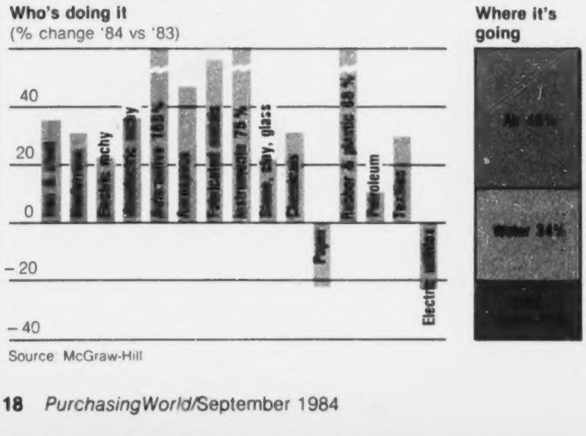
Be prepared to continue shelling out hefty sums for pollution control gear. This year American industry will be buying about $9.5 billion worth of equipment to keep our air, waterways and land free of contamination, up 4.3% from 1983 levels.

One consolation is, according to a recent McGraw-Hill survey, that it is under the $10-11 billion spent in the late '70's when there was a lot of catching up to do.

Other key findings of the new study:

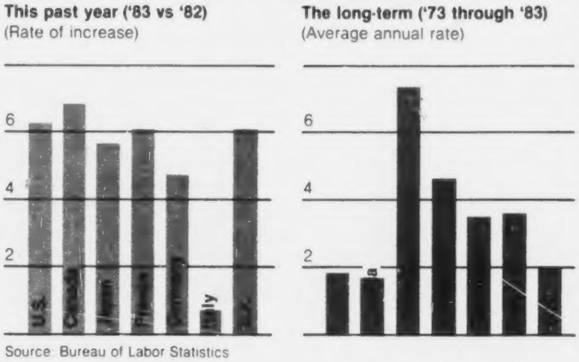
- **Manufacturing versus non-manufacturing:** The entire 1984 increase will be centered in the factory sector where firms plan on a big 19% increase.
- **Next year's outlook:** Preliminary plans call for spending about $10 billion in 1985, up another 5% or so. Once again, it will all be due to manufacturing, with non-manufacturing again dropping by an even larger 13%.
- **The big dollar spenders:** Despite utilities' percentage declines, the industry will continue to shell out the largest dollar amounts, followed by, in descending order, the petroleum, chemicals, and non-electric machinery sectors.
- **Type of equipment:** Air pollution control will continue to lead the pack, with 46% of all planned '84 outlays. Water control will take another 34% chunk, with the remaining 20% going for solid waste disposal.
- **Spending relative to total capital outlays:** The figure is declining both because of (1) the large jump in this year's expansion and modernization program and (2) a trend to more lenient clean-up rules. Put in proper perspective, the percent of total outlays for pollution this year will be just 2.7% versus 3% last year and a high of 5.6% in 1976.

Pollution control: more big spending ahead



Source: McGraw-Hill

Global productivity trends



Source: Bureau of Labor Statistics

Global productivity

The nation may finally be coming out of its long productivity slump, with U.S. efficiency gains over the past year equaling or topping most of our overseas competitors.

To be sure, there is a cyclical influence (we recovered faster than most of our industrial trading partners and this tends to make for a larger-than-normal boost).

But there are signs of more meaningful improvement, too. Recent increases have been somewhat better than might have been expected on the basis of cyclical factors alone. Reason: Cost cutting and other fat paring efforts on the part of many domestic firms are beginning to pay off. Another factor could be automation as more of typical capital spending is going toward modernization rather than expansion.

Don't expect miracles *vis-a-vis* our foreign competitors—there's still a long way to go before we catch up with the rest of the industrialized West. The second part of the accompanying chart tells why. Over the past ten years our lackluster 1.9% average annual productivity increase has run at half or less Japan, France, Germany and Italy.

These figures, when combined with wage boosts, explain why Japanese competition is so keen these days. Over the past decade annual Japanese productivity gains have been much higher than in the U.S. (87.4% versus 1.9%), and Japanese wage rates have been a bit lower (8.6% versus 9.3%).

Even though the yen has appreciated a bit relative to the dollar during this extended period, Japanese unit labor cost increases (calibrated in U.S. dollars) ran about half the U.S. annual rate (3.9% versus 7.3%).

CURRENT PRICES

Prices still holding steady

Add still another month to the continuing string of stable or near-stable price reports.

Since the beginning of the year, for example, industrial producer quotes have moved up only 1.5%. Even going back a full year, the advance is only 2.7%.

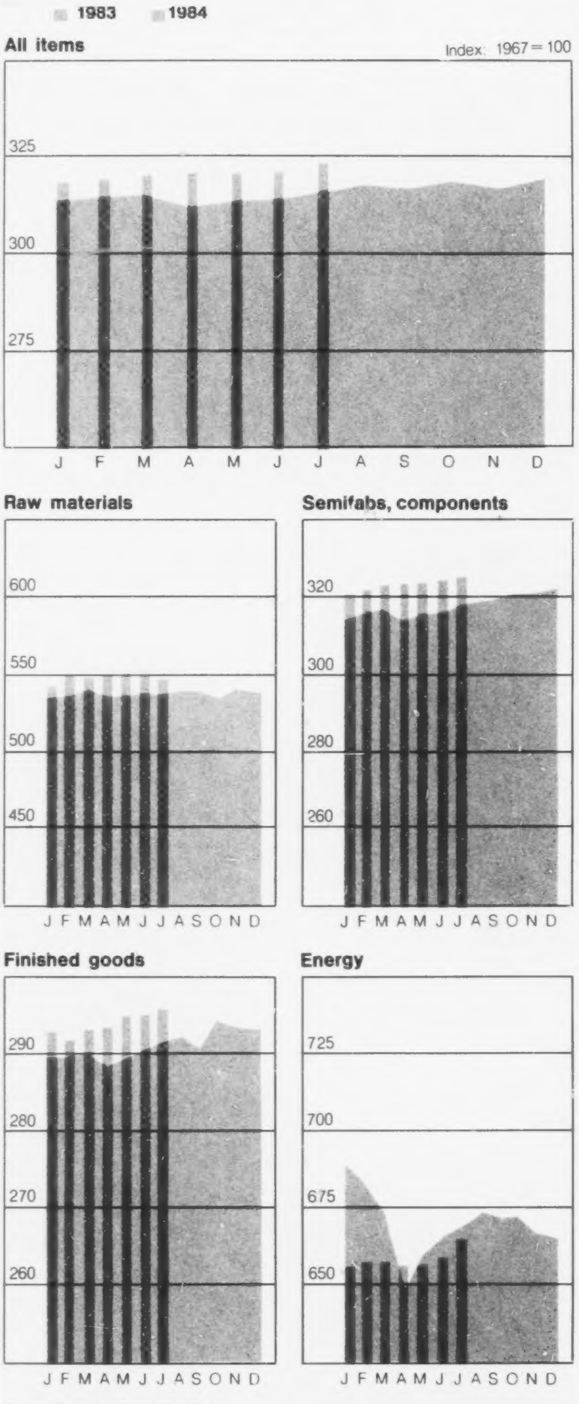
That isn't to say all product lines are faring equally as well. Paper, with operating rates in the 95%-plus range, continues to show some hefty advances, with year-to-date increase put at 11% for paper and nearly 12% for paperboard.

But paper is not the rule. Electronic components, also in short supply, have posted only a 3.6% average gain for the

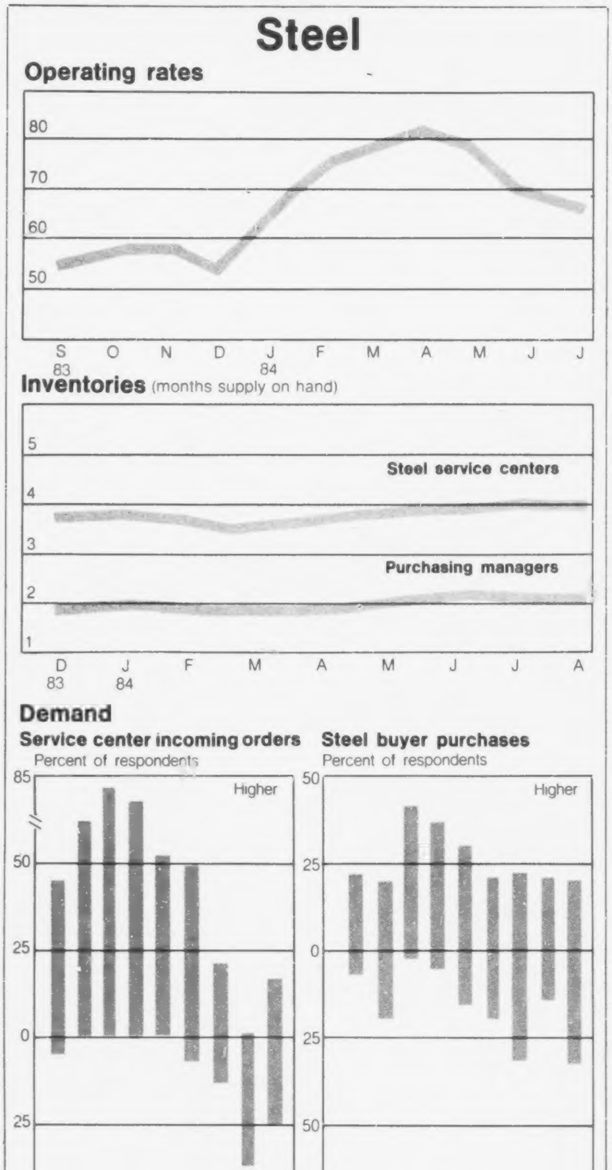
This month's breakdown

	Latest level (July)	% change from: Month ago	Year ago
Bearings	343.3	1.6	3.6
Bolts, nuts, etc	278.5	−1.3	4.6
Chemicals, inorganic	293.9	0.7	−0.4
Chemicals, organic	370.5	−0.2	−0.4
Concrete products	310.6	0.2	2.7
Corrugated cartons	262.7	−0.1	8.5
Cutting tools, small	279.7	0.1	0.0
Electric lamps (bulbs)	336.3	−1.7	7.4
Electronic components	192.3	0.2	3.6
Fans and blowers	351.0	0.2	4.0
Foundry and forge products	361.1	0.1	2.6
Fuel oil (residual)	1159.4	0.8	10.2
Furniture, commercial	297.9	0.3	3.6
Gasoline	573.0	−2.0	−7.6
Glass, flat	227.4	0.0	−1.0
Glass containers	367.1	0.3	4.4
Gypsum products	360.6	0.1	30.7
Hand tools	358.1	0.3	2.5
Hand tools, power driven	224.3	1.5	0.5
Industrial furnaces	374.4	0.0	3.3
Integrating and measuring instruments	230.5	0.6	3.9
Internal combustion engines	345.3	0.2	0.8
Lubricating oil	797.8	0.0	2.8
Lumber millwork	305.7	0.2	3.2
Material handling equipment	289.0	0.1	1.5
Metal containers	348.4	0.1	3.5
Metal mill shapes (nonferrous)	322.9	−1.1	3.7
Metal tanks	306.4	0.6	0.1
Motors and generators	340.3	0.0	1.6
Motor trucks	282.4	0.0	4.6
Office and store equipment	154.2	−0.1	−0.1
Paperboard	279.1	0.0	11.8
Paper boxes and shipping containers	263.8	0.3	6.6
Paper office supplies	243.6	−0.4	7.4
Paint	274.1	1.2	3.4
Plastic resins	309.9	−0.3	6.4
Precision measuring tools	253.3	0.0	3.1
Pumps and compressors	349.9	0.1	0.6
Refractories	362.9	0.0	7.3
Rubber belts and belting	350.0	−0.7	7.2
Scales and balances	231.1	0.0	1.1
Steel products	364.4	0.6	4.7
Switchgear	275.0	0.5	1.3
Textiles, synthetic fibers	160.1	−0.2	1.1
Textiles, gray fabrics	154.1	−0.1	5.5
Tires and tubes	244.1	0.2	0.7
Transformers and power regulators	227.9	0.2	1.7
Welding equipment	281.6	0.1	1.3
Wire and cable	201.2	−1.1	−1.5

Industrial prices



Source: Bureau of Labor Statistics



Steel

Operating rates

Inventories (months supply on hand)

Demand

Service center incoming orders

Steel buyer purchases

Import prices (compared to domestic)

Steel buyers

Service centers (carbon steel)

Source: Steel Service Center Institute, NAPM Steel Buyers Committee

year. Other high-demand raw materials such as plastic resins and construction materials have not increased significantly.

There continues to be price softness in the key energy sector as new declines in gasoline, home heating oil and crude oil more than offset small increases in coal, residual fuel, natural gas and electricity.

A similarly soft picture is evident in chemicals which are normally quite sensitive to a business pickup, yet both organic and inorganic chemicals are still under year-ago levels.

There isn't much buoyancy in metals either. New easiness in aluminum, copper, zinc, and lead has erased some of the earlier gains in the non-ferrous area. Big discounts of earlier this year have started to reappear in some steel product lines.

Other more highly fabricated products are exhibiting a mixed picture. Over the past month increases in paint, power driven hand tools, bearings, and switchgear have been pretty much offset by declines in fasteners, rubber belts and belting, wire and cable, bulbs, and office equipment.

No major firming trend is apparent in capital equipment either, despite a pickup in orders over recent months. Metalworking, for example, is still running only 2.3% ahead of a year ago. Year-to-date increases are less than 2% in some electrical areas such as transformers and power regulators.

How long will the overall non-inflationary trend continue? While government price collectors hesitate to project, most give off-the-record forecasts of only 1% fourth quarter advance, only fractionally higher than the pattern of the past 12 months.

STEEL SCENE

No upturn on the horizon

Don't expect any near term spurt in steel buying, according to new surveys of both buyers and sellers.

Only 19% of the PMs queried by the NAPM Steel Buying Committee expect to increase their receipts of steel in the next three months—little changed from late spring and early summer. And it's far less than the 33% who actually expect to reduce their steel take this fall.

Distributors responding to the latest Steel Service Center Institute (SSCI) aren't very bullish either. Although the 17% who expect an increase in incoming orders over the next few months is better than the 2% figure noted the previous month, it is well under the 25% expecting a decrease in orders.

The fourth quarter isn't promising either. It appears the October-December shipment total will reach only about 19 million tons, well below the 20.6 million tons for the recent second quarter peak.

These new numbers change the outlook for the whole year. Current trends suggest only about a 77 million ton year, short of the 80 million ton estimates of some a few months back.

The SSCI feels its own members will do fairly well this year, predicting distributor shipments will run 15-20% ahead of last year when '84 is finished.

Even here a note of conservatism is sounded, with 72% of SSCI members thinking stock levels are too high and some 68% saying they would like to reduce these inventories over the next few months, compared to the 2% who still contemplate some increases.

Talks with individual service centers confirm these strategies. There are widespread plans by distributors in the East, Midwest and South to use existing inventories as their main supply source.

One reason for this cautious approach could be the possibility of an auto strike later this month, which some analysts predict could last 1-2 months, cutting into fourth quarter steel consumption.

Whatever the reason for caution, the drop-off in ordering and shipments has made everything loose again. Steel service centers, for instance, see every product remaining readily available for the next three months.

Reduced concern is also noted by steel buyers, but a few say they are keeping a weather eye on coated sheet.

Bargains are still the order for imports. Some 82% of steel buyers say foreign metal is now cheaper.

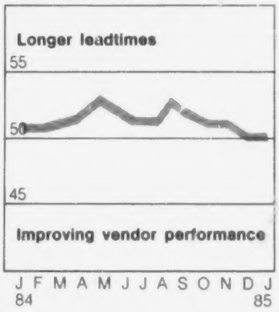
Again, steel service centers agree, with 73% saying carbon steel is 6-10% below comparable domestic levels, and another 15% put the price break in the 11-20% range.

Distributors say much the same for stainless, with 79% noting a 6-10% price advantage for foreign, and 21% putting the saving in the 11-20% range.

Monthly procurement status report

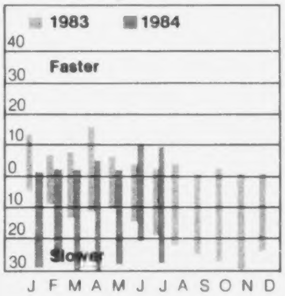
Leadtime index

A 'diffusion' index based on 158 key commodities. Above '50' indicates a tendency for leadtimes to stretch out. Below '50' suggests improving vendor performance.

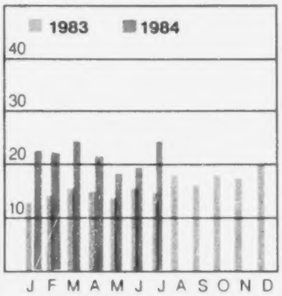


Delivery performance

Percent reporting deliveries

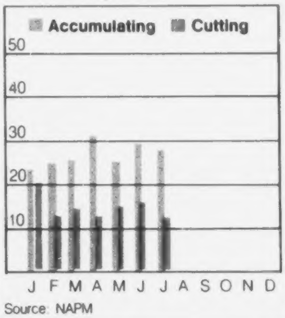


Forward commitments



Inventory strategy

Percent of respondents



Source: NAPM

PROCUREMENT STATUS

PW's index on "50" line for second month

With a few stretchouts and reductions, 90% of the 160 or so items monitored regularly by *PW* show the same weekly waits as a month ago.

PW's exclusive lead time index remains squarely on the neutral "50" line for the second month in a row, a good sign that things have stabilized.

This is also confirmed by the latest NAPM Business Survey report which finds 9% of the respondents still noting faster deliveries, slightly under the 10% noted last month.

No serious shortages are expected. Even the recent tightness in electronic components seems to be easing. A fair number of PMs surveyed feel the normal fall business pick-up, combined with relatively high vendor operating rates, suggest some inventory accumulation.

Again survey results tell the story. At latest report, some 20% were still adding to their stocks, nearly three times the 12% who said they were paring.

This modest concern is also reflected in some additional forward buying. Of the PMs queried, 24% said they were ordering production materials 90 days or more in advance, up from last month's figure of 19%.

But these buyers add that things are well under control. As one purchasing executive puts it: "We may be ordering a bit more, but only because we expect to use it up over the next few months. In short we really do not expect any significant change in our overall day's supply which remains pretty much at an all-time low."

Leadtimes and availability

Chicago: Strike hedging has stretched coal from 1½ to 2 weeks currently. Chrome chemicals are also out (to 2). Ditto, softwood sheathing (to 2). But narrowing leads are noted for wrapping paper (2 to 3), PVC resins (1) and brass and copper—with special orders for sheet and coil down to 8-10 and rod down to 6.

Cleveland: Coil coating paint has stretched out slightly to 6 weeks. And despite some demand easing, cold-finish aluminum waits hold at an extended 14 weeks. Lumber and plywood remain available at 3. Also unchanged are polyethylene and PVC (3-4), folding boxes (4) and 2-ply fiber drums (2).

Los Angeles: Computer peripherals have moved out to 8-10 weeks. Also stretching a bit are connectors (40) and passive components (30-36). Coming in are paperboard cartons (3-4), selected chemicals (4-6), and electrical equipment (20-24). But no change in grey iron castings (4-6) and galvanized steel (12-16).

BUSINESS DATATRAK

Houston: The summer lull has left things pretty much at month-earlier levels—with these current weekly waits reported: High pressure heat exchangers (26-60), forgings (5-7), control valves (8-26), pumps (26-43), mill steel (4), service center steel (1), MRO items (3), electric and electronic components (8).

Philadelphia: Some difficulty in getting polyethylene bags which are now out 3-5 weeks. Also moving higher are corrugated boxes (3), fasteners for wooden cases (3), chemicals for foam-in-place packaging (½ to 1), standard reinforced gum tape (1-4), and tall oil (6-8 without contracts). But white and yellowgreases are in to 1-2.

Pittsburgh: Minor changes here—with a 2-week increase (to 8) in manganese offset by a similar 2-week reduction in zinc (to 2) as supplies ease. Other typical weekly leads: Tissue paper (5½), lumber (3), polyethylene (4), PVC resins (6), folding cartons (3½, plastic packaging (3), magnesium (4), and tin (3).

Leadtimes (in weeks)

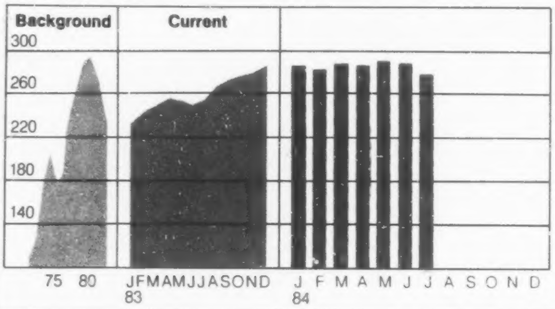
	Now	Month ago	Six months ago
STEEL			
Sheet (Phil)	9	9	9
C-R Sheet (Chgo)	5	5	8½
Plate (Phil)	10	10	10
Plate (Chgo)	2½	2½	4
Reinforced (Hous)	6	6	6
H-R Bars (Phil)	7	7	4½
H-R Bars (Chgo)	3	3	3
Cold-Drawn Bars (Phil)	7	7	4½
Galvanized (LA)	14	14	20
Galvanized (Chgo)	6	6	7
Structurals (Chgo)	3½	3½	2½
Structurals (Hous)	17	17	17
Tubing (Phil)	7	7	7
Grey Iron Castings (LA)	5	5	6
Steel Castings (Hous)	11½	11½	11½
Forgings (Hous)	6	6	5
Pipe, Carbon (Hous)	13	13	13
ELECTRIC & ELECTRONIC			
Cables (Chgo)	8½	8½	8½
Capacitors (Chgo)	17	17	16
Circuit Breakers (Chgo)	6	6	6
Electromech. Devices (LA)	7	7	9
ICs (Linear) (Phil)	20	20	20
Motors (Phil)	15	15	21
Motors, 1000 hp & Up (Hous)	39	39	39
Printed Circuit Boards (Chgo)	20	20	12
Relays (Chgo)	15	15	15
Resistors (Chgo)	14	14	10
Resistors, Wirebound (Phil)	10	10	9
Transformers (Chgo)	10	10	10
LUMBER			
Hardwood (Pgh)	3	3	3
Hardwood (Clev)	3½	3½	3½
Plywood (Chgo)	2	2	1½
Plywood (Phil)	1½	1½	1½
Softwood (Clev)	3	3	3
Softwood (Phil)	½	½	½
Softwood (Pgh)	3	3	3
Particleboard (Phil)	2½	2½	2½
CHEMICALS-PLASTICS			
Adhesives (LA)	½	½	½
Napthalene (Chgo)	2	2	2
Paint (LA)	5	5	4
Paint, Coil Coating (Pgh)	4	4	4
Paint, Maint. (Cleve)	3½	3½	3
Polyester Resin (LA)	2	2	2
Polyethylene Resin (Cleve)	3	3	3
Polyethylene Resin (Pgh)	4	4	4
PVC Resin (Chgo)	1	3	2½
PVC Resin (Pgh)	6	6	4
Titanium Dioxide (LA)	1	1	1
PACKAGING			
Bags, Kraft (Pgh)	5	5	5
Bags, Multiwall (Clev)	9	9	9
Bags, Multiwall (Pgh)	6	6	6
Cartons, Corrugated (Cleve)	3	3	3
Cartons, Corrugated (Hous)	3	3	3
Cartons, Folding (Phil)	6½	6½	6½
Cartons, Folding (Pgh)	3½	3½	3½
Cellophane Wrap (Phil)	5	5	5
Plastic Bags (Pgh)	3½	3½	3½
Plastic Pkg. (Pgh)	3	3	3
Shrink Film (Chgo)	4	4	4
Shrink Film (Clev)	3	3	3
Drums, Fiber (Pgh)	1	1	1
Drums, Steel, Std. (Pgh)	1	1	1
Wood Pallets (Chgo)	2½	2½	2½
Wirebound Boxes (Pgh)	4½	4½	4½
Strapping (Clev)	2½	2½	2½
Strapping (Pgh)	3	3	3
PAPER			
Fiberboard (Clev)	3½	3½	3½
Glassine (Clev)	4½	4½	4½
Glassine (Pgh)	5½	5½	5½
Groundwood (Clev)	4½	4½	4½
Groundwood (Pgh)	7	7	7
Kraft (Clev)	1	1	1
Kraft, Bleached (Clev)	1	1	1
Kraft, Bleached (Pgh)	5	5	5
Kraft, Natural MFNS (Clev)	1	1	1
Laminated (Clev)	4	4	4
Tissue (Pgh)	5½	5½	5½
NON-FERROUS			
Aluminum Coil (Chgo)	13	13	11
Aluminum Plate (Chgo)	14	14	9
Aluminum Sheet (LA)	4½	4½	4½
Aluminum Sheet (Chgo)	13	13	14
Brass Castings (LA)	7	7	7
Brass Rods (Chgo)	6	10	3½
Brass Sheet (Chgo)	9	17	13
Brass Tube (Chgo)	5	9	9
Copper Fittings (LA)	3½	3½	3½
Copper Mill Prod. (Pgh)	6	6	6
Copper Tube (LA)	5½	5½	5½
Copper Tube (Phil)	6	6	6
Lead (Pgh)	2	2	2
Magnesium (Pgh)	4	4	6
Manganese (Clev)	8	6	2
Nickel (Clev)	1	1	1
Nickel (Pgh)	2	2	2
Silicon (Clev)	1	1	1
Tin (Pgh)	3	3	3
Wire, Specialty (LA)	5	5	6
Zinc (Pgh)	2	4	6
MISCELLANEOUS			
Bearings, Domestic (Phil)	22	22	12
Bearings, Foreign (Phil)	26	26	26
Boilers & Furnaces (Hous)	35	35	35
Compressors, Centrifugal (Hous)	48	48	52
Compressors, Reciproc. (Hous)	39	39	43
Fasteners (Chgo)	1½	1½	1½
Fasteners (LA)	7	7	6
Fasteners, Std. (Phil)	2½	2½	2
Heat Exchangers, Carbon-alloy Steel (Hous)	20	20	20
Heat Exchangers, Hi-pressure (Hous)	43	43	21
Insulation Mat'l. (LA)	7	7	7
Machined Parts (Hous)	9	9	9
Pipes & Valves (Chgo)	2	2	2
Pumps (Hous)	35	35	39
Pumps (LA)	9	9	9
Rubber, Synthetic (LA)	2	2	2
Rubber Hose (LA)	4	4	4
Tungsten Carbide Parts (Hous)	15	15	15
Valves, Cast Steel (Hous)	17	17	6½
Welding Supplies (Hous)	5	5	5

BUSINESS DATATRAK

Raw material price barometer

Index: 1967 = 100

Latest month	**280.1**
Month before	**286.2**
Year ago	**256.0**



Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	367.00	367.00	347.00
Steel, structural shapes, Pitts., cwt.	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt.	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt.	24.40	24.40	24.40
Steel, bars, dlvd. Phila., cwt., merchant quality	23.95	17.50	17.50
Steel, bars, Pitts., cwt.	23.95	17.50	17.50
Steel, bars, C.R., Pitts., cwt.	29.25	26.00	26.00
Steel, plates, Pitts., cwt.	23.25	23.25	25.75
Steel, plates, H.R., Pitts., cwt.	23.25	23.25	25.75
Steel, sheets, C.R., Detroit, cwt.	27.10	27.10	26.15
Steel, strip, C.R., Chi., cwt.	35.30	35.30	29.05
Steel, basic wire, Pitts., cwt.	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	0.553	0.578	0.735
Antimony, in alloy, lb.	2.00	2.00	2.00
Beryllium-copper, cost ingot, lb.	5.20	5.20	4.95
Brass, red, 85%, [sheet], lb.	1.23	1.25	1.29
Brass, yellow, [sheet], lb.	1.18	1.20	1.23
Cadmium, ton lots, lb.	1.55	2.25	1.15
Copper, electrolytic, wire bars, refd., lb.	0.62	0.65	0.77
Copper sheet, over 24 in., lb.	1.32	1.30	1.38
Lead, common, N.Y., lb.	0.280	0.300	0.20
Magnesium, pig ingot, [99.8%], lb.	1.48	1.48	1.38
Mercury, 20 fl. lots, N.Y., fl.	295.00	318.00	275.00
Molybdenum Climax Oxide/bags, lb.	4.65	4.65	4.65
Nickel, electrolytic, producer, lb.	3.20	3.20	3.20
Platinum, producer, oz.	475.00	475.00	475.00
Silver, N.Y., oz.	7.67	7.59	11.62
Tin, Straights, N.Y., lb.	6.28	6.29	6.49
Zinc, Prime West, East St. Louis, lb.	0.48	0.50	0.43
Zinc, die casting alloy, No. 3, lb.	0.555	0.565	0.465
PAPER			
Uncoated book #3 offset, ton	850.00	850.00	680.00
Watermarked bond, ton	985.00	985.00	845.00
Gummed sealing tape, carton	16.02	15.85	15.50
Boxboard, mach. clay ctd. recycled sheets 80 bright, .016, ton	495.00	495.00	475.00
Wrapping paper, std. distributor cost, kraft, basis wt. 50 lb., roll	28.00	28.00	28.00
Kraft linerboard, 42 lb., unbleached, ton	350.00	320.00	270.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd.	0.339	0.329	0.252
Cotton drill, 1.85, 59", 68x49, N.Y., yd.	1.04	1.04	0.98
Cotton middling, 1", N.Y., lb.	0.622	0.715	0.743
Printcloth, 48", 80x80, N.Y., spot. yd.	0.76	0.76	0.63
Army duck, 37", 13 oz., yd.	1.91	1.91	1.63
Blended printcloth, 64", 78x54, yd.	0.77	0.76	0.71
20s combed yarns	2.10	2.16	1.78
Wool tops, N.Y., lb.	3.60	3.60	3.60

	Latest price	Previous month	Year ago
CHEMICALS			
Acrylonitrile, tanks, lb.	0.455	0.455	0.430
Ammonia, anhydrous, fertilizer, wholesale, tanks, ton	210.00	210.00	150.00
Benzene, petroleum, tanks, Houston, gal.	1.28	1.41	1.51
Caustic soda, 76% solid, drums, carlots, cwt.	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb.	0.58	0.58	0.58
Formaldehyde, USP, 37% [12% to 15% meth.], tanks, lb.	0.106	0.106	0.106
Glycerine, synthetic, tanks, lb.	0.81	0.81	0.73
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	0.54	0.54	0.48
Naphthalene, crude, tanks, lb.	0.22	0.22	0.22
Phthalic anhydride, tanks, lb.	0.305	0.305	0.275
Polyethylene resin, low density liner film grade (market price), lb.	0.410	0.400	0.380
Polypropylene, homopolymer grade (market price), lb.	0.400	0.415	0.360
Polystyrene, general purpose grade (market price) lb.	0.41	0.41	0.38
Shellac, bone dry, N.Y., lb.	1.65	1.65	1.65
Soda ash, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	0.35	0.35	0.34
Sulphur, crude, ex-terminal, Tampa, Fla., lt.	140.00	140.00	132.50
Sulphuric acid, 66%, commercial, tanks, ton	56.85	56.85	56.35
Titanium dioxide, anatase, reg., carlots lb.	0.69	0.69	0.69
Xylene tanks, gal.	1.33	1.33	1.33
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	307.55	316.20	346.50
Lumber, 2x2, pine, mbf, cl	301.65	311.15	345.30
Plywood, plyform, ¾", msf, cl	567.70	568.00	565.55
Plywood, ⅝", msf, cl	364.05	363.55	365.85
Cement, bulk, ton, tl	63.75	61.37	62.35
Sand, ton, cl	6.07	6.05	5.95
Ready-mix concrete, 3,000 psi/cu.yd., 15 cu. yd.	46.73	45.50	45.73
Crushed stone, 1½", ton, cl	7.53	7.68	7.90
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.77	0.77	0.75
Gypsum sheathing, ½"x1"x8", msf, tl	204.57	203.15	167.99
Brick, common, per thousand, tl	173.08	176.13	171.95
Asphalt paving, AC-20	168.06	165.20	157.00
Concrete sewer pipe, 12", prem. joint, per foot, cl	7.04	6.97	6.69
FUELS			
Fuel oil, No. 6 or Bunker C, Gulf., bbl.	26.00	26.15	25.25
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	30.50	31.50	31.25
Gasoline, 91 oct., reg., Los Angeles, rack, gal.	0.730	0.700	0.865
Gasoline, 94 oct., reg., Chi., tank car, gal.	0.771	0.766	0.883
Heating oil, No. 2, Chi., bulk, gal.	0.785	0.808	0.829
Heating oil, No. 2, N.Y., bulk, gal.	0.773	0.798	0.858
Heavy fuel, PS 400, Los Angeles, rack, bbl.	26.50	26.50	25.98
Jet kerosene, gal.	0.760	0.760	0.825
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	0.405	0.410	0.490
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	82.00	86.00	79.00
Steel, No. 1, hvy., dlvd., Chi., ton	77.00	78.00	73.00
Copper, No. 1, East, wholesale buy, dlvd., lb.	0.550	0.550	0.690
Copper, No. 2, East, wholesale buy,	0.465	0.460	0.615
Brass, red, East, wholesale buy, dlvd., lb.	0.510	0.510	0.655
Brass, yellow, East, wholesale buy, dlvd., lb.	0.350	0.380	0.365
Alum., old sheet/cast, E., wholesale buy, dlvd., lb.	0.345	0.395	0.430
Alum., mixed clip., E., wholesale buy, dlvd., lb.	0.370	0.420	0.450
Zinc, old, East, wholesale buy, dlvd., lb.	0.200	0.230	0.095
Lead, clean solids, East, wholesale buy, dlvd., lb.	0.165	0.180	0.103
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	30.00	35.00	25.00
Paper, old corrug. box, dlr., N.Y., ton	25.00	32.00	20.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb.	0.12	0.14	0.095
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb.	0.37	0.34	0.35

[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]

Non-ferrous supplies ample, prices steady into '85

It has been a good spring and summer for most non-ferrous metal buyers, with ample or even more than ample supplies and few significant price increases.

This trend looks likely to continue through the remainder of this year and into 1985 as well.

What makes the price performance so encouraging (at least from the PM's point of view) is that as recently as six months ago many analysts were predicting major price runups, citing the experience during the last big boom in 1980, when non-ferrous quotes moved up a whopping 17%.

The chart demonstrates just how wrong those analysts were. Despite a 10% plus increase in U.S. industrial production this year, non-ferrous price averages will be up only about 3%. At latest report they were still running a surprising 14% under the peaks of early 1980, just before the market began to nosedive.

Not all metals have behaved in the same way.

Since the current upturn began early last year, for example, there have been substantial increases as well as declines (*see second section of the chart*). But few of the metals monitored have been able to regain their peaks. A few, such as copper, silver and gold, are as much as 30% or more under previous highs.

A more detailed rundown following this overview examines the specific pressures buffeting many of these metals. But there are some factors fairly common to all which help explain why the 1983-84 metal recovery has been so different from most of the previous ones.

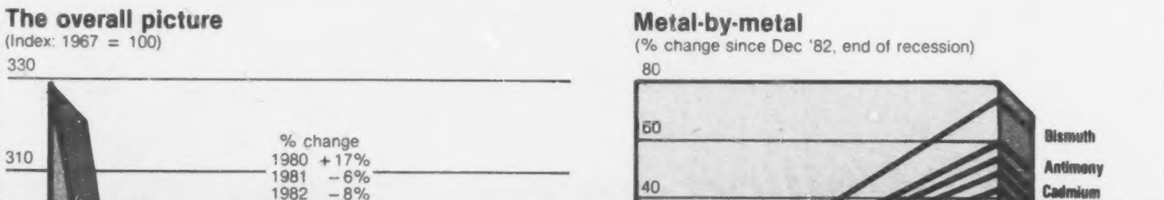
Probably one of the most important contributors is the buoyant dollar with its continuing appreciation *vis-a-vis* other currencies—making it potent enough to attract unusually large tonnages of low priced imports to U.S. shores.

One source recently estimated that anywhere from 5% to 15% of the easiness of the past six months can be traced back to what he characterizes as "overvalued currency."

High interest rates have played an equally significant role by dampening speculative interest, not only for gold, silver and platinum, but for some of the base metals such as copper and aluminum.

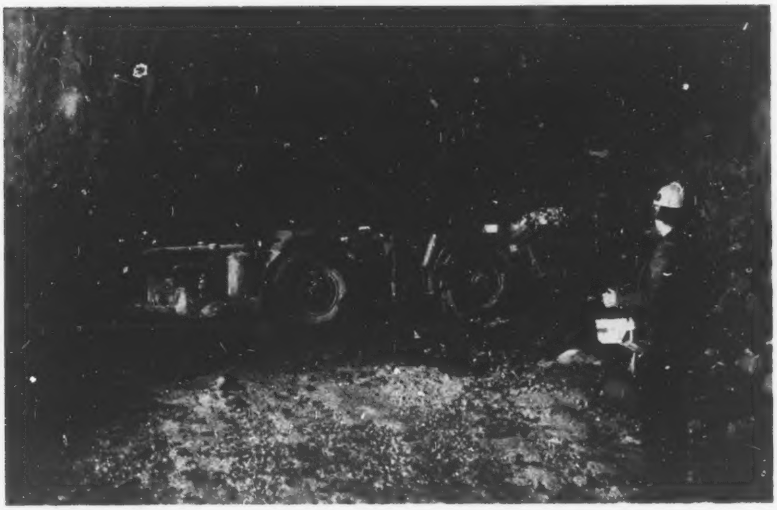
Note that today's sky high interest rates not only raise the cost of financing metal purchases, but they make alternative investments such as stocks more attractive.

Another important factor damp-



Nonferrous price trends

Sources: Bureau of Labor Statistics, Metals Week, PW Estimates



ening speculative interest has been the surprisingly low inflation rate. Low inflation tends to remove the incentive to invest in metals which have historically held their value better than paper currencies.

And there are crucial supply-demand principles at work with inventories in most metals remaining very high, some of which are well above the normal so-called day's supply levels.

A related supply factor is excess global capacity which hangs as an ever-present threat over the market. Indeed, it's more than a threat as exchange hungry Third World countries continue to produce recklessly in order to generate foreign exchange to keep their troubled economies afloat.

Consumption has also been less then hoped for by metals people. Capital equipment, for example, a major user of non-ferrous materials, has only recently begun to turn up. And non-U.S. business recovery, particularly in Europe, hasn't been that robust.

In addition to these factors, metal use per unit of output is slowly declining as a result of a combination of improved technology, miniaturization, and increasing availability of substitute materials, all of which contribute to holding down demand.

What's the future? First, mounting cost pressures and a fall seasonal pickup are bound to have an upward impact, but, as suggested from the chart, any price increase in the upcoming fourth quarter will be minimal as far as overall non-ferrous averages are concerned.

And 1985 does not promise any dramatic shift to an all-out bull market in non-ferrous metals primarily because U.S. gains are expected to taper off by then. Current information projects only a 10 million unit-car-year as opposed to 10.4 million in 1984, and high interest rates are expected to drop housing starts to perhaps only 1.5 or 1.6 million in 1985 as opposed to 1.8 or 1.9 million in 1984.

The slowing down of demand in these two key metal markets is expected to offset gains in other areas thus limiting overall metal demand increases to about 2% to 4%, which is well under this year's projected advance.

This type of scenario suggests little more than nominal price increases, with overall non-ferrous averages lagging behind the projected overall general inflation rate of 5% to 6%.

Metal-by-metal outlook bright for buyers

Zinc

Demand for zinc has improved with the U.S. economic recovery. Consumption of slab zinc is up 13% over a year ago, but domestic consumption is down because of strikes at major lead-zinc mines. Imports are holding adequate to meet any increased demand.

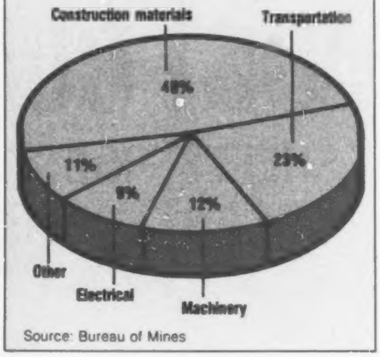
Imports now account for 66% of domestic production with the bulk coming from Canada, Mexico and Peru, all stable sources of supply.

The price of high grade zinc, which averaged 42¢/lb last year, is now running about 48¢/lb, a drop from 50¢. Higher prices are encouraging the development of new zinc deposits within the U.S.

Zinc recently has been gaining ground lost to aluminum and plastics in one of its major markets, diecastings, due to 1982-83 runups in the price of aluminum, and the better appearance of zinc diecastings over plastics.

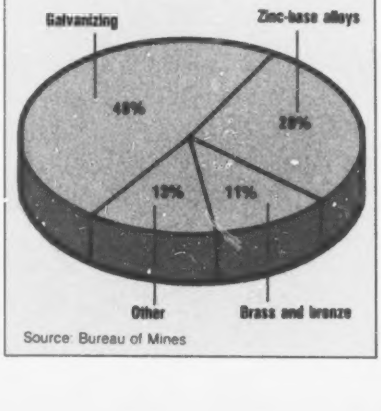
The industry continues to seek new applications for the metal such as zinc dry cell batteries for automobiles, emergency rooms and in computer storage banks. ...continued

Zinc consumption



Source: Bureau of Mines

Slab zinc—markets



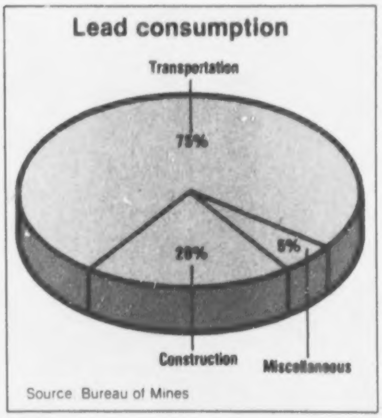
Source: Bureau of Mines

The industry's single largest expansion resulted from the Treasury Department's switch from 5% zinc/95% copper in the penny to 97.5% zinc/2.5% copper. this accounted for an additional 50,000 tons of zinc annually or about 5% of U.S. zinc consumption.

Lead

Despite a 50% cut in output due to strikes at mines and smelters, supply is ample and the outlook is for an increase in supply due to the erosion of key markets. The industry is making a major effort to open new markets to take up the slack.

In 1979 the average U.S. price for lead was 52.6¢/lb. Since then it has declined steadily to 22¢/lb last year and this year rose to 32¢-35¢/lb, leveling off at its present 30¢/lb.



Source: Bureau of Mines

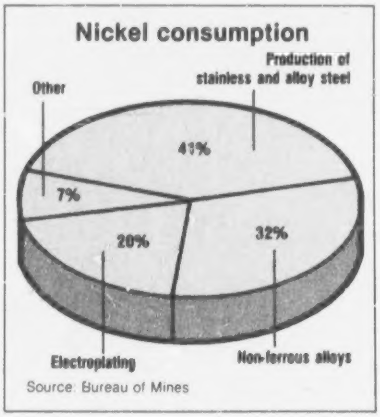
EPA's designation of lead as a health hazard and pollutant has also contributed to its declining market, in spite of industry claims it can be used safely under proper conditions. EPA also announced plans to cut the permissible amount of lead in gasoline by 91% by 1986 with a possible total ban by 1995 thus threatening to shrink lead's second most important market. Its most important market is automobile batteries.

The industry is seeking new applications in airport ground support equipment powered by lead batteries, further development of electric vehicles, and the use of lead in chemical form to extend highway life and reduce maintenance.

The industry is also trying to foster the use of lead in architecture in the U.S. The UK, according to Werner Meyer, president of the Lead Industries Association, uses ten times as much lead as the U.S. in buildings for flashing, roofing and siding. But U.S. architects and craftsmen are not familiar or skilled with the use and installation of lead in building.

Nickel

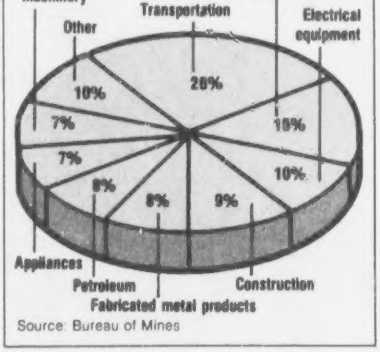
Domestic demand for nickel posted its first increase in four years with a 16% rise in 1983 and has been steadily increasing this year, mainly due to what an industry expert calls "unprecedented levels of stainless steel production."



Source: Bureau of Mines

While supply of this metal is still plentiful and the price relatively low, inventories have been declining since January. The current $2.00/lb on the London Metals Exchange is low compared to the 1983 New York average free market price of $2.25.

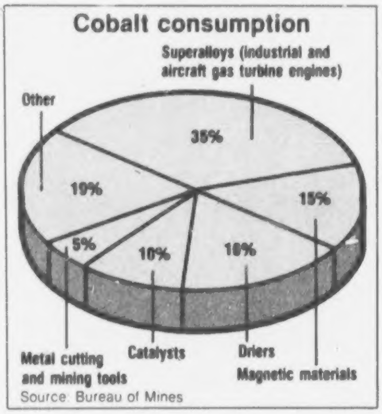
A Nickel Development Institute, composed of free world nickel producers, was formed in Canada recently to develop new markets and promote the use of nickel products.



Source: Bureau of Mines

Cobalt

Cobalt's current price of $ll/lb is double that of a year ago, but still low compared to $25/lb in 1980 and $21 in 1981. Worldwide supply remains plentiful. The U.S. imports all of its cobalt with 50% coming from Zaire and Zambia, which could both easily increase production, and the rest coming from Canada, Belgium, Luxembourg, Japan, Norway and Finland.

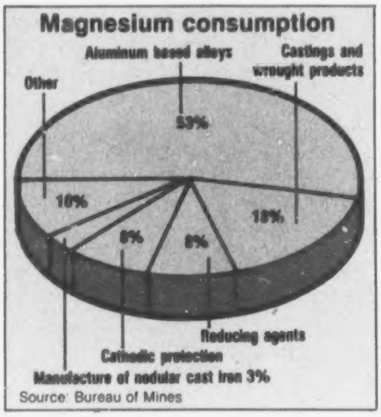


Source: Bureau of Mines

Magnetic materials account for about 15% of cobalt's U.S. markets, with Alnico magnets the leader of cobalt containing magnets. Samarium cobalt magnets appeared to open a new growth area with lightweight, powerful magnets mainly for application in lightweight electric motors; however, GM and Sumitomo Metal Industries have developed neodymium iron bar (NIB) magnets which are expected to be less expensive than cobalt magnets, weigh less and have better magnetic properties. GM is planning to use them in 1986 models in starter motors which will be smaller and weigh half as much.

Magnesium

A 20% increase in magnesium consumption in 1983 over 1982 reduced inventories and triggered more production of the metal. Although demand is expected to increase annually by 5% to 7% through 1990, it is



Magnesium consumption

Source: Bureau of Mines

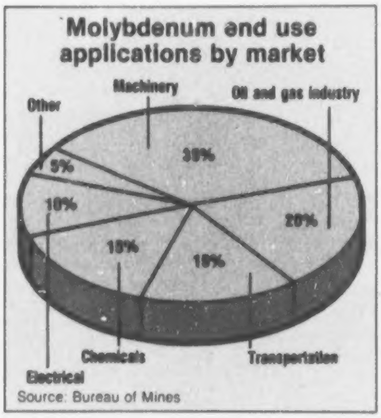
still well below capacity.

Increased demand is due largely to increased use for alloying aluminum for beverage can stock and in steel desulfurization. About 70% of North American steel is desulfurized, most of it with magnesium. Also, magnesium pressure diecastings became more attractive as aluminum prices were rising relative to magnesium, particularly in the automotive industry where they offer a combination of high strength and light weight.

Molybdenum

Despite a projected 30% increase in U.S. consumption this year and a 15% increase worldwide, high inventories and ample supply will keep a lid on prices. The current price range of $3.60 to $3.80/lb has been fluctuating within a narrow range for the past nine months.

Signs are that molybdenum production will rise faster than demand because several mines started when prices were higher in the mid 1970's are now coming on stream. Four to five months supply is considered optimum by producers, but at least one estimate puts worldwide supply at 12 months.



Molybdenum and use applications by market

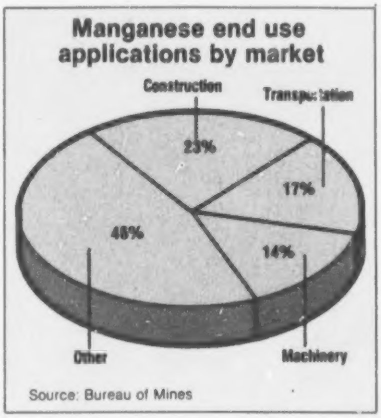
Source: Bureau of Mines

The major use of molybdenum is as an alloying agent to harden steel and its increased demand follows increases in steel production, especially for heavy duty applications such as construction equipment and machinery.

Manganese

Because manganese continues to be in oversupply, no price increases are expected in the near future.

Most manganese ore is converted into ferroalloys for use in steel production, with the upturn in steel demand, manganese has risen.



Manganese end use applications by market

Source: Bureau of Mines

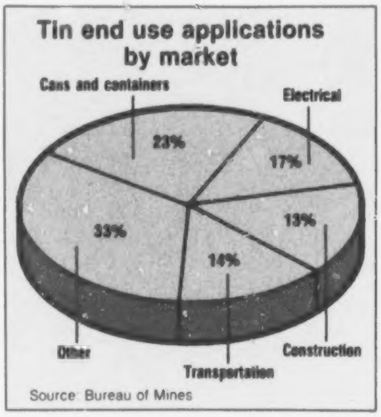
The U.S. imports 95% of its manganese principally from South Africa, Gabon, Australia and Brazil.

Tin

As aluminum and plastic containers continue to make inroads into the steel can market, one of tin's major markets, less tin is needed.

U.S. consumption has been declining annually. In 1979, 69,000 tons were used at an average price of $7.11/lb. Last year, 48,000 tons were used at an average New York market price of $6.02. Currently, it's running around $5.75/lb.

The International Tin Council cartel (Malaysia, Indonesia, Thailand, Australia, Nigeria and Zaire), which has maintained the floor price for tin for the past 27 years, cut shipments to try to dry up world oversupply. But illegal exporting of semirefined tin from Malaysia for refining in Singapore threatens the cartel's efforts.



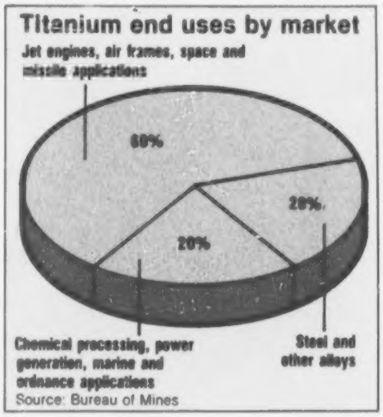
Tin end use applications by market

Source: Bureau of Mines

Some economists predict that if the ITC cartel collapses, the price of tin will drop by 50%.

Titanium

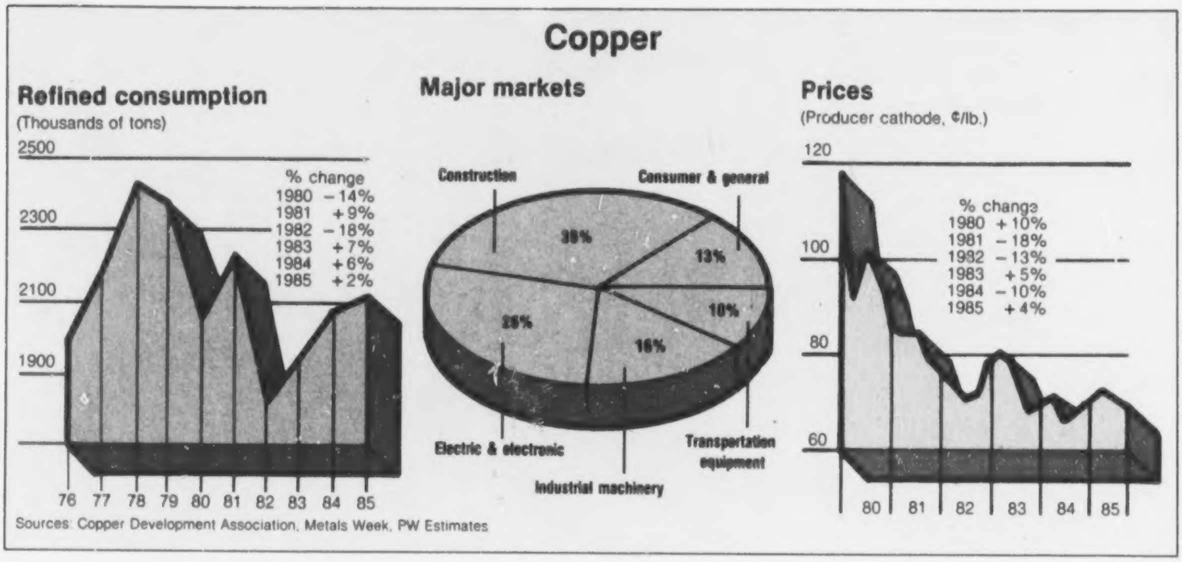
Titanium sponge metal production is marked by a combination of weak demand and plentiful supply with production running at only 50% of capacity. This year's production is estimated at 18,000 tons with consumption pegged for 20,000 tons, hardly making a dent in current inventories.



Titanium end uses by market

Source: Bureau of Mines

Most titanium sponge metal is used in commercial aircraft, defense and aerospace production. Until those markets improve significantly, the supply-price situation will hold steady. ***PW***



Copper

Refined consumption (Thousands of tons)

Major markets

Prices (Producer cathode, ¢/lb.)

Sources: Copper Development Association, Metals Week, PW Estimates

Cu + Al: in search of markets

The red metal continues to take its lumps.

Prices are actually below 1983 levels—20 months after the onset of the current business recovery (*see chart*). Copper has fluctuated (as recently as March it was fetching 76¢/lb). But the rallies have fizzled, with prices for producer cathode now in the low-to-mid 60's.

But a case can be made against claims the metal will continue to sink. For example, tags are about as low as they're going to get—with a possibility of a modest fall rally in the making.

Commodity exchange inventories are a case in point. During the first six months of the current year, combined LME and Comex stocks fell by over 250,000 metric tons—enough to take some of the downward pressure off the trading floor.

Demand isn't that bad either. This year, for example, refined U.S. consumption could be up as much as 6%—on top of last year's 7%—reflecting recent gains in some of copper's big markets, namely construction, electric, electronic and transportation equipment. Even in 1985, U.S. refined consumption could be up a few additional percentage points even though general economic gains are expected to slow down.

Adding to the demand total are 150,000 to 200,000 tons of free world metal to be exported to the Chinese this year. Even though this is 25,000 tons under last year it still has to be regarded as a firming element.

There is also talk of imposing U.S. quotas to stem the growing import tide. Imported refined copper was up over 36% in 1984 on top of last year's huge 70% jump.

Quotas would roll back these gains, but they would also redirect U.S.-bound shipments to other markets thereby depressing tags in these other markets.

Also, quotas would tend to give foreign fabricators an added competitive edge in U.S. markets. That would add insult to injury here given the fact U.S. fabricated copper product imports have been recently running better than 50% ahead of last year's levels.

Even if quotas and the other upward-tugging factors do have some influence on raw copper tags, it would be unrealistic to expect any major price runup, principally because a few of the forces which pushed the metal into its current corner are still operating.

Third World countries continue to spur output in an effort to earn badly needed foreign exchange. Chances of improvement in this area are unlikely.

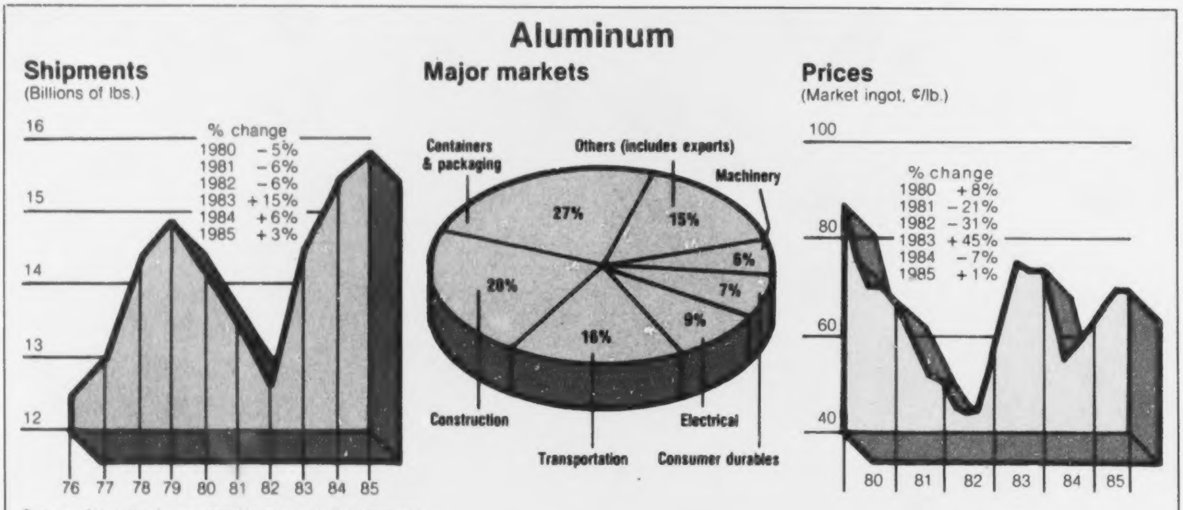
Chile is a good example. In spite of the world glut, they have just announced a three year plan which would increase copper production topping last year's output of 1.275 million tons to 1.410 million tons annually by 1986.

Compounding the problem is Chile's ability to produce the metal at 50¢/lb as opposed to 85¢ to 90¢/lb required of American producers who are also saddled with lower grade ores, higher labor costs and pollution controls.

Overseas production gains are offsetting producer attempts to bring supply and demand closer to balance. And, while domestic producers are operating at below 60% of potential, global output continues to climb, hardly the recipe for a firming market.

Copper is extremely sensitive to even small surpluses. For example, over the past three years the production-consumption gap was only 3%, but this was sufficient to knock 35% off the going price.

Consumption doesn't seem likely to rise in the next few years either. Miniaturization and substitution, such as fiber optics in telecommunications, have already made big dents in copper's traditional mark-



Sources: Aluminum Association, Metals Week, PW Estimates

ets. Few new markets loom on the horizon. Long term growth prospects are put at about 2%.

It is possible the price could edge up to 70¢/lb, but this is still 30% under the earlier level of a $1/lb.

The domestic industry is troubled and looks as though it will remain so for a while. As one metal analyst put it: "Unless prices of 90¢/lb can be sustained over the next few years, domestic producers will have to close some of their high-cost facilities, thus making this country more vulnerable in yet another critical metal."

Aluminum

Vitality seems to be the name of the game now.

After taking off late last year and into early 1984, the light metal has done a flip-flop. A new moderately firming trend could be in the making, beginning next month.

The sudden decline in aluminum's fortunes took both buyers and sellers by surprise. Tightening supplies and rising prices gave way to glut, shorter lead times and much lower quotes.

Producer transaction prices in the ingot sector have dropped to 63.5¢/lb. Merchant prices are only in the mid-to-upper 50's range, versus 75¢ at the beginning of the year, and IME tags are even lower.

Several factors are behind this sudden shift: One, producers overestimated the extent of the demand pick-up and reactivated facilities too soon. Also, imports in the first half of '84 are running 60% ahead of a year ago.

Corrective action is underway. Producers, for example, dropped the U.S. primary operating rate to around 80%, about five percentage points under the levels of a few months ago.

And demand, while not setting records, is around 15.5 billion pounds this year, about a 6% increase from last year. While this is not as dramatic as last year's 15% spurt (*see chart*), combined with production curtailments it could be enough to stem the price slide now and allow a slow upcreep to set in this fall and into early 1985.

The chances for a bounceback of ingot to 70¢ levels of a few months ago is highly unlikely for at least another 6 to 12 months as supplies remain adequate and demand gains gradually taper off with expected slowly decelerating GNP gains.

The reattainment of the official 81¢/lb producer list on ingot does not appear to be in sight.

Tags on more highly fabricated product lines should show similar trends, i.e. recovery, but nothing spectacular. While some of the softness in common alloy sheet and some extrusion lines might disappear, any increases should remain in the manageable range.

Packaging and construction are expected to remain number one and number two respectively on the demand scale. Some gains are possible in transportation. For example, Ford plans to put aluminum radiators in 90% to 95% of its domestically produced cars by 1988, up from 20% currently.

In the long run, things look fairly stable for at least the next five years or longer. The 4% average annual free world demand gain projected for the 1985-1988 period should be easily met with existing and planned capacity.

The same situation seems likely to prevail even into 1995. CRU Consultants, a New York and London based metals firm, expect only a moderate amount of smelting capacity will be needed over the next decade.

They conclude, "Include projects currently under construction and only 14 major projects or expansions will be needed over the 12 years from 1983 to 1995, far fewer than the 27 greenfield smelters that were built from 1972 to 1983."

CRU also hastens to add that a greater portion of the supply will be coming from sources other than the U.S., Europe and Japan. By 1995, combined Canadian, Oceanic and Latin American capacity will make up 36.1% of the free world potential, compared to only 23.1% now.

PW

Inventory survey

No new build-up soon

Inventories are still in good shape as missing production schedules offset the added tonnages moving into factory storerooms, so say the majority of PMs responding to a new nationwide *PW* survey.

But not everyone is completely satisfied. A fair number of respondents would still like to see their stock levels a bit lower. But nobody seems ready to push the panic button.

This is a conclusion confirmed by the Commerce Department's figures. Latest readings show the key durable goods stock/sales ratio for purchased materials (a time-tested measure of PM's days' supply) down sharply from the beginning of the year, with little indication of any new build-up.

The reasons for the "keep 'em lean" strategy are not too hard to find. Aside from today's high cost of carrying inventories, there's a ready availability of most products.

One buyer cites the fact that unlike the upturns of the 60's and 70's, inflation isn't around to bail out those who over-buy. As he puts it, "If we order too much now, we could take a bath with little chance of selling off the excess at a profit as we did during the past few decades."

A closer look

Here's a detailed evaluation of how PMs see the inventory situation:

- **Current status:** Only 14% of the respondents characterized their stocks as being "much too high" and that's balanced out by an almost equal percentage who feel that some accumulation may be in order.
- **Tonnage plans:** While the figures suggest some slight paring through early next year, it doesn't look to be anything dramatic. Again the 7% who anticipate major declines are offset by 4% who plan significant additions over this period.
- **Price hedging:** This is still a viable strategy despite high carrying costs. More than two out of five PMs say they are not opposed to laying in a bit extra when a fair sized vendor boost seems imminent. Production lines where this is currently going on include steel, electronic components, plastic resins, packaging, coal, and selected component parts.
- **Strike hedging:** This is virtually nonexistent, primarily because there seems to be little indication of work stoppages ahead except for coal. An auto strike is also possible, but this would not be crucial for most purchasing departments.
- **Lead time trends:** There is still some concern about stretchouts, with about one out of three respondents keeping a weather eye on at least a few product lines. Some fear longer waits could hit electronic parts, steel, electrical products, specialty items and some lines of equipment.

One surprising finding is that the average carrying charge is put at only 18% per year, but talks with PMs suggest this might be understated since many do not consider the cost of money in their calculations; and often when they do, it is figured under the prime rate. Make a correction for this and the average charge is somewhere around 24-30%, or 2-2.5% per month.

But whatever such costs are, buyers seem determined to keep stocks as low as possible. Some of their approaches:

Better use of MRP, more exploration of the "just-in-time" concept, closer relations with vendors, increasing emphasis on long term contracts, blanket orders, and consignment buying.

Using distributors more

Several also talk of shifting more buying dollars to distributors. Observes A.L. Caridi of Pittsburgh's Power Piping Co., "We are evaluating the possible advantages of buying from local distributors and maintaining low inventories, versus buying directly from manufacturers and maintaining high inventories."

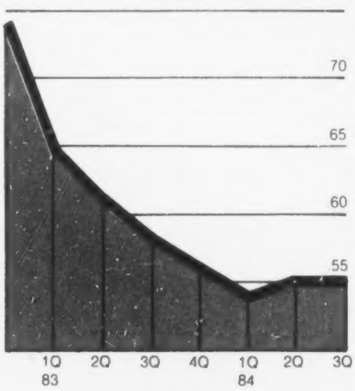
On the subject of vendor relationships, many buyers say they are using both the stick and the carrot, insisting centers coordinate deliveries with their own particular production schedules, in turn promising bigger orders.

How inventories stack up

Recent trends

Stock/sales ratio

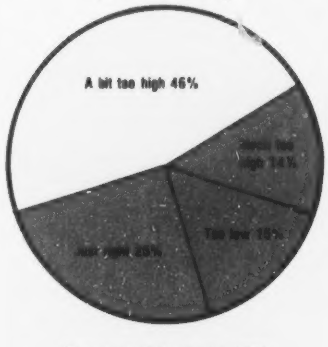
(Durable purchased materials)



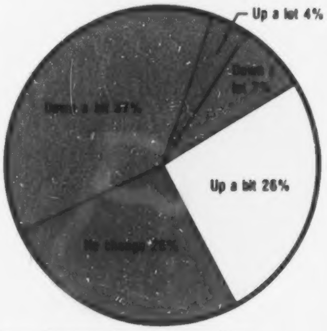
What PMs say

Current evaluation

(% of respondents)



Tonnage into early 1985



Source Commerce Dept , PurchasingWorld

As one midwestern buyer sums it up, "We're not going to work miracles, and sooner or later days' supply will again begin to climb. But given all our new tools, I would hope we are beginning to cut down the amplitude of the business cycle, something that will not only aid us, but will also help keep the economy on an even keel." **PW**

Quarterly freight report

Freight bargains end but hikes to be moderate

Freight isn't quite the bargain it was last year, with tariffs moving up at a faster clip, but increases are expected to be moderate compared to those of the late 1970's when double-digit or near double-digit boosts were common (*see chart*), according to transportation analysts at Wharton Econometric Associates.

Dramatically improved traffic and increasing capacity utilization are the principal reasons for WEA's projection of a 6.2% increase, which is well above the 1.5% and 2.2% boosts posted in 1982.

Acceleration is expected to continue into next year, too, when the average freight tab is expected to advance by 7% as additional upward tugging factors continue to be felt.

Critical factors: (1) unions are likely to demand a bigger cut as transportation company profits recover; (2) energy price increases should heat up; (3) major truck and barge carriers are being hit with higher taxes.

The good news is next year's increases are a bit under the projections of 7.9% made just three months ago, mainly because energy price projections have come down.

Also, the anticipated economic slowdown in 1986 should limit any overall freight increase to around 4.9%.

Overall rate averages can be deceiving because different factors impact differently on each mode. Here's a brief rundown on what to expect in each specific sector:

Rail: Heftier rate increases stem from the industry's better health. Rail revenue ton/miles for the year

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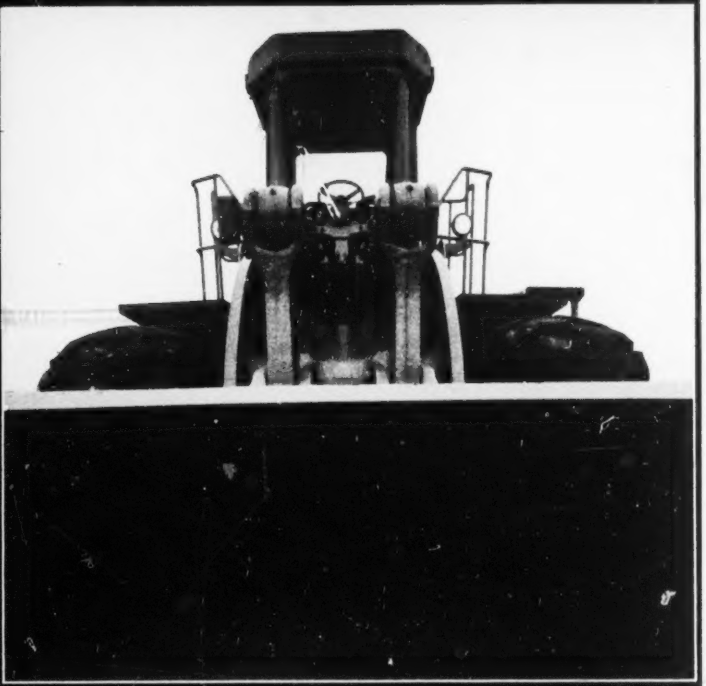

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through early July are 15.8% above last year's level, boosted by 17.1% rise in piggyback carloadings.

These traffic increases should support a 6.4% tariff boost this year, about 1% more than suggested three months ago.

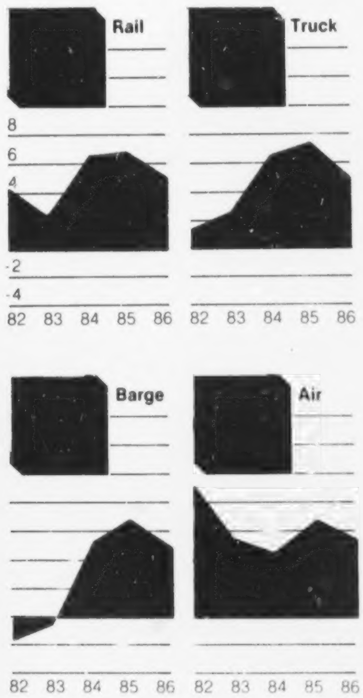
Wharton calculates about the same rate of increase next year (1985). This is less than other modes of transportation and reflects improved efficiency at holding operating costs in check. The absence of any large tax increases should also help keep tags in line.

Truck. Good business is the prime mover leading to higher rates here, too. An American Trucking Association survey of Class I and Class II carriers of general freight shows May ton/miles up 14.2% over last year's levels.

...continued

Freight cost outlook by mode

Percent increase over previous year



Source: Wharton Econometric Forecasts

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Freight bargains end but hikes to be moderate

Outlook for the current year is for about a 6.4% increase, more than triple last year's modest 2%.

Anticipate further acceleration in 1985 to about 7.1% which is slightly higher than other modes.

Reasons: (1) climbing operating costs; (2) new legislation to exact $600 annual road use fees for vehicles over 55,000 lb and another 6¢ a gallon gas tax.

Barge: The declines over the past two years (3.9% in 1982 and 0.6% last year) are over, but lingering overcapacity will limit increases to a modest 5.2% this year.

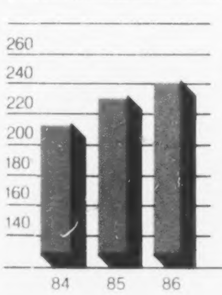
The 2¢/gallon gas tax scheduled for next year should push up prices by about 6.9%. The 1986 outlook is for about 5% increase, consistent with other modes.

Air: Freight traffic has been running about 10% ahead of last year, but tough competition should hold increases to around 4.7% this year, nearly two percentage points under projections of three months ago.

Projections for 1985 have also been revised downward from 11% predicted three months ago, to 6.9%. ***PW***

PurchasingWorld freight rate index

Index 1972 = 100



Increase over previous year	
1978	7.9%
1979	9.4%
1980	12.7%
1981	7.7%
1982	1.5%
1983	2.2%
1984	6.2%
1985	7.0%*
1986	4.9%*

* Estimated

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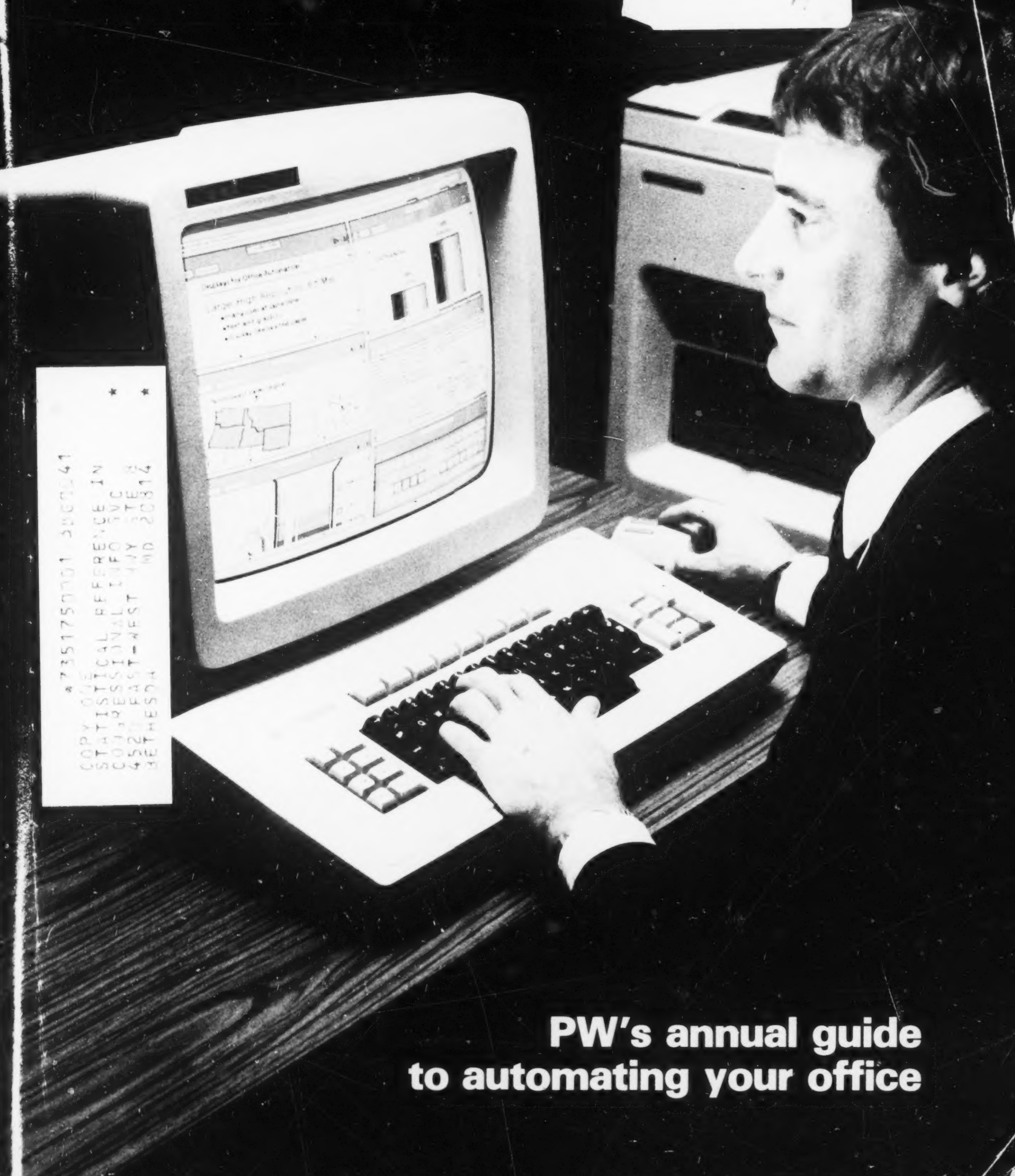

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Vol. 28, No. 10-October 1984

Features

34 Marketing change seen by truckers
Motor carriers will have to develop new strategies to cope with stiff competition and the effects of deregulation, according to a recent study by management consultants Booz, Allen, Hamilton as reported in this month's *PW Transportation Report.*

38 The chameleonic p.o. revisited
Dr. John E. Murray, Dean of the Villanova University School of Law and regular *PW* columnist, takes us through a close-up view of how many and varied are the shades of use of the purchase order.

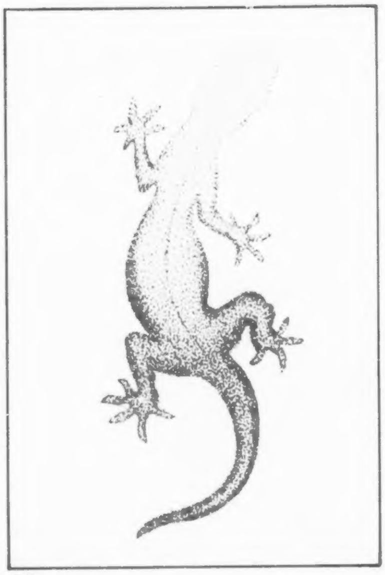
46 Vendor VA training helps buyers
Buying is at the "cutting edge" of the new and better, says noted consultant and *PW* columnist Lawrence D. Miles. That and a lot more are reasons why buying is an exciting discipline, he says in this month's *Miles on Value Analysis* column.

51 PW's guide to automating your office
This year's *Business Data File* covers electronic typewriters, facsimile machines, and copiers. This useful listing is our way of keeping you up to date on the latest developments in this rapidly changing area of purchasing interest.

66* Capital equipment: whither low bids?
The bid process isn't necessarily the fairest method for selecting contractors, says *PW* columnist and noted consultant on negotiations Louis J. DeRose. Trying to make bids comparative, he says, can often lead to high costs all the way around.

83* Tech file: cold-roll metal parts
Cold-roll shaping of metal parts is increasing in popularity because, among other reasons, it can be the lowest cost metal parts-making process and there is virtually no loss of material, according to the American Institute for Iron & Steel.

Cover photo: Up to six display windows, representing six different computer operations under way simultaneously, are displayed on the large screen of a Xerox 8010 Star information system. Workstations share electronic filing systems and laser printers.



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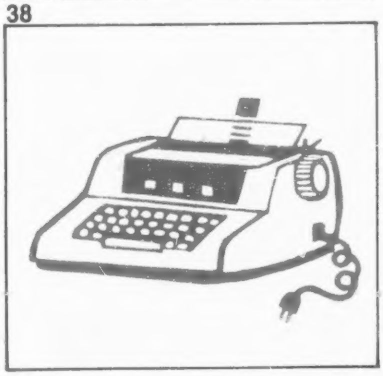

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PW PREDICTS

Robert S. Reichard, executive editor

Labor, productivity help hold price line

Credit much of the current price restraint to surprisingly modest labor cost pressure. Actually there are two separate factors operating here:

- **(1) Relatively low pay hikes.** Average weekly earnings are running about 5% ahead of last year. While unions are beginning to flex their muscles, it is unlikely increases will be greater than about 6% over the next 12 months. Office salaries are likely to follow the same pattern, with a recent survey suggesting about 6% for both this year and 1985.
- **(2) Increasing worker efficiency.** Productivity has been rising at close to a 4% rate since the recession ended in late 1982. This accelerated pace won't continue (generally, the further into an economic expansion, the more difficult it is to effect big gains). Most economists are looking for good 2-3% gains for the coming 12 months as companies step up programs for updating equipment and plants.

Place these gains against the probable wage hikes noted above, and unit labor costs are likely to rise at only a 3-4% rate through the next few quarters, thus minimizing upward cost pressures on prices.

Another significant inflation inhibitor is the failure of basic commodity prices to rise sharply as they have traditionally done during extended business upturns.

This unanticipated development can be attributed to a combination of factors, including: (1) excess capacity from the big buildup of the late 1970's, (2) miniaturization—in cars, airplanes, houses—which has reduced the amount of material used for finished products, (3) heavy commodity exports of copper and other materials by debt-ridden Third World nations, (4) a strong dollar which, aside from reducing U.S. landed costs, also draws additional supplies into the country, (5) high interest rates which discourage speculation and inventory building, and (6) the increasing availability of substitute materials which makes producers hesitant to post big new price boosts.

What does this all add up to? While it would be unrealistic to expect the current near-stable price pattern to continue indefinitely, there are still few signs of any significant acceleration.

This seems to be confirmed by an August Louis Harris Poll of the nation's top businessmen which showed a drop to 55% in the number anticipating even a small increase in the inflation rate against 81% three months earlier.

This optimism on the part of businessmen can be self-fulfilling in that companies that expect less inflation are less likely to raise their own prices in self-defense.

The Congressional Budget Office projections sum the situation up, calling for only a 5.3% increase in the all-inclusive GNP price deflator, not significantly above the 4.1% advance anticipated for the current 12-month period.

Labor costs and prices

Unit labor costs (wage rates moderated by productivity gains) may be the best indicator of underlying price trends available these days.

A recent Commerce Department study seems to indicate as much. Looking at all industries, the analysis suggests a surprisingly close cost-price relationship in almost all instances.

The accompanying "scatter diagram," which plots the relationship in key industrial sectors for the past decade, illustrates this cause-and-effect relationship.

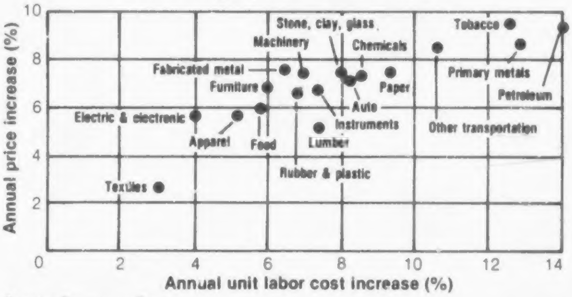
Note, in almost all cases, low unit labor costs beget relatively low inflation rates, while high unit labor costs are usually accompanied by hefty price increases.

Equally significant, the correlation is almost perfect for the all-industry total. Specifically, a 7.7% annual increase in unit labor costs since the early '70's resulted in a 7.6% annual increase in the overall price level.

The relationship seems to explain the low annual rates of inflation in textiles (3.0%), and electric and electronic equipment (5.9%). Both of these industries have been fortunate to have had high productivity increases and hence relatively low unit labor costs boosts.

This close correlation between cost and price is one of the primary reasons the near-term outlook remains noninflationary. Put simply, relatively low wage hikes this year (6% or less in most instances), combined with strong efficiency gains (close to 4% at annual rate during the first half of '84), point to relatively small unit labor cost increases and therefore continued modest price hikes in the months and quarters immediately ahead.

The wage-price connection



Source: Commerce Dept

PW PREDICTS

Aluminum

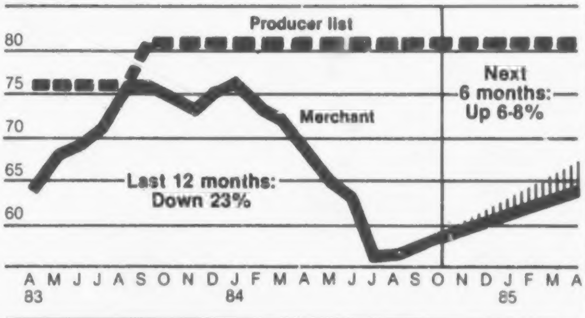
CURRENT SITUATION: Markets remain quite soft—despite significant U.S. production cutbacks of the last few months. Thus merchant ingot has recently gone for under 55¢/lb—a far cry from the 76¢/lb the metal was commanding as recently as January. Easiness is spreading into fabricated lines—with discounts as high as 12% reported in common alloy sheets, and some extrusions dropping as much as 14-18¢/lb. There's also a lot of foreign material around.

DEMAND: Aluminum will remain well in the plus column this year—with U.S. shipments rising to nearly 15.5 billion lb—some 6% or so above last year. Packaging and construction will remain the No. 1 and No. 2 markets, respectively—though packaging gains will slow down to only about 3%. Buying for auto use should be up sharply. Next year—a decelerating economy suggests little more than a 3% increase—with 4% annual increases thereafter.

SUPPLY: No real problems are seen—certainly not for the rest of 1984 nor for 1985 or 1986 as well. Current U.S. operating rates (78.5% at latest report) suggest ample room for demand gains as do new overseas smelters coming on stream. One recent global study finds that only 14 major projects or expansions will be needed through 1995—half the number of greenfield smelters built during 1972-73. With most built overseas, we'll become more import dependent.

PRICE OUTLOOK: Any bounceback to early 1984 peaks will be slow—both in the ingot and fabricated products sectors. Ingot tags won't move much beyond the 60¢/lb level by yearend—even with announced production cutbacks. Beyond that, things look bullish for the metal as long as the economy doesn't flatten out or dip. Ingot quotes should be up near 65¢/lb by next spring, enough to permit the industry a modest return—as production costs only run in the 50-55¢/lb range.

Aluminum ingot
(cents/lb)



Electronic components

Markets may be ready to take a breather. New forecasts suggest an annual rate of rise of 2-3% over the next 12 months, far under the 6% advance over the past year. Prices could dip in such areas as the popular 64K DRAM—perhaps to under $3/unit before year end—as combined Japanese and U.S. capacity begins to exceed demand. Also, further falls in this key component are likely next year. Reason: manufacturing cost is less than $1/unit.

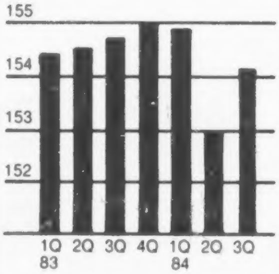
Computers

Softness persists. Thus knee-tops are dropping, with price reductions ranging up to 37% reported on some of the more expensive models. On the low end of the line both Tandy and NEC now offer machines for as low as $599. Not even the big mainframes are exempt from broad gauge reductions. Over the past few months, cuts of over 30% have been reported, with low prices now in effect on many IBM, National Semiconductor, Amdahl, and Tandem models.

Office equipment

Sophisticated machines for the modern office continue to edge lower. In addition to the continuing fall off in computers, good buys are also appearing in electronic typewriters where some heavy-duty models are off as much as 30-45% over the past year (to as low as $695), and copiers where the Japanese are now actively pursuing the lucrative 40-60 copies-per-minute market. Overall, this makes office equipment one of the best buys today—with increases for the next year put at under 1%—far under the 4-6% inflation rate projected for all industrial prices.

Office Equipment Prices
(Index: 1967 = 100)



Cumene

Weak benzene contract prices ($1.32/gallon) are pushing tags down to near 22¢/lb, some 1.5¢/lb under recent spring levels. Two other factors behind the cumene decline are weakening demand from construction-related uses and rising imports. All this contributes to softening prices in downstream phenol where quotes have fallen 2¢/lb (to 34¢/lb) over the past few months.

Lead

Markets are softening despite U.S. strikes. Behind the easiness is a combination of forces including (1) continued high production levels at struck plants, (2) weak foreign markets, (3) direct sales by European producers to the U.S., (4) ample domestic producer inventories, and (5) high battery inventories. Consumption is also slow paced with year-to-date totals up only 2-3%. True, prices could rally again this fall if strikes persist, but gains will be modest—to maybe 30¢/lb—and they could well tail off again in early '85 when demand drops seasonally.

Zinc

Markets have turned soft again. Behind the tail off: Ample supplies, plus steel mills have been reluctant to carry more than bare minimum stocks. Consumption continues to hold up well—with year-to-date totals running better than 10% above '83 levels. Next year's gain should be smaller as auto and housing demands level off—with the advance only in the 3-5% range. But that should be enough to support a price in the low 50's, a few cents above current levels.

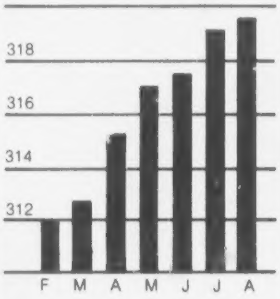
Sulphuric acid

Be prepared to pay about $10/ton more for 100% acid, despite the continuing oversupply. Even with the new hikes, some tags remain as much as 60% under 1981 peaks. One reason for the current firming—aside from somewhat better demand—could be rising sulphur quotes. The price of this key acid raw material has risen $7.50/ton FOB Tampa (to $147.50). While competitive allowances ranging up to $10/ton will continue, they will be off the higher list.

Paper

Prices are still on the rise, but the rate of advance seems to be slowing slightly. Significantly, scattered softness seems to be shaping up in some sectors. Discounts have appeared in uncoated white paper where substantial new capacity is being added. Also, the $30/ton increase in linerboard is meeting opposition. At least one seller is reported extending big volume contracts at the older, lower price for another six months.

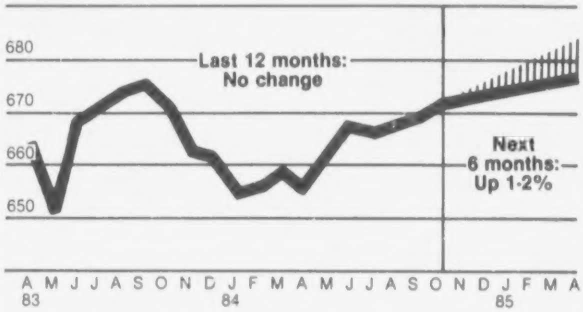
Paper prices
(Index: 1967 = 100)



Copper

Still no sign of any major rally. The overall trend should be mostly up from here on, despite Washington's rejection of import curbs. Signs of bullishness include (1) steady stock declines on both Comex and LME, (2) some tightness in concentrates, (3) a modest uptick in orders as consumption runs close to 10% above '83, and (4)

Fuel and power
(Index: 1967 = 100)



Fuel and power

CURRENT SITUATION: Good news continues—as a lingering oil glut keeps a lid on virtually all energy tags. Demand is beginning to rise and OPEC is making some headway in curtailing output. But there's enough oil to go around with prices remaining virtually unchanged from a year ago. Here's how prices compare for individual sectors: crude oil (same), natural gas (1%), gasoline (-8%), fuel oil No. 2 (2%), kerosene (2%), jet fuel (-2%), diesel fuel (2%), and coal (2%).

DEMAND: A booming economy suggests about a 3% overall increase in energy use. Nuclear power (up 6%) should show the largest increase with coal and electricity expected to rise by 5%. Even hard-hit natural gas (where demand fell 5% last year) will show a 3-4% gain. Ditto, petroleum where last year's nearly 1% decline will give way to an increase of 3%. In energy use oil will capture 42% in 1984 followed by gas (25%), coal (23%), and all other (10%).

SUPPLY: It looks like smooth sailing—barring either a prolonged coal strike or a Middle East blowup. U.S. dependence on Persian Gulf oil is low—only about 500,000 barrels a day—or just 3% of total U.S. supplies. The U.S. impact would be cushioned by 400 million barrels of oil in the Strategic Petroleum Reserve—enough to last 800 days if Middle East oil exports stopped and even 80 days if all U.S. imports were suspended.

PRICE OUTLOOK: A recent DOE forecast provides the cheery details about projected 12-month changes through mid-1985: gasoline, No. 2 fuel and jet fuel (no change); No. 6 resid. fuel (-3%). Natural gas, electricity and coal are all expected to rise by about 6% over that time span, but some of this may be overly pessimistic. Thus in natural gas, discount contracts with large users are becoming widespread. As for coal, the fuel is quite vulnerable in view of heavy stockpiles.

continuing U.S. production cutbacks to near 50% of capacity. Given the above, prices could well edge into the 75-80¢/lb range by mid-1985, if we can avoid a business downturn.

Credit

Expect vendors to tighten up credit terms in the months ahead. A new survey by the National Association of Credit Management finds 32% of queried credit managers planning on increasingly stringent policies over the next six months, far outweighing the 1% who plan some easing. Another indicator of a crackdown is 13% contemplate an increase in the use of service or interest charges on past-due accounts (versus only 2% who see decreases).

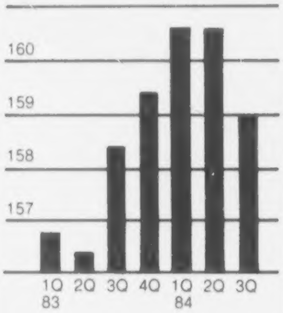
Cement

Recent increases have raised averages to near $64/ton, close to 4% above recent spring levels. Another hike is possible by early next year, possibly in the $69-70/ton range, as operating rates rise in line with stepped-up road building. The average mill will operate at near 94% of its potential this year, up from 89% last year. In 1985, the figure could rise to nearly 96%, suggesting possible supply problems, especially in the Northeast and Midwest.

Textiles

Manmade fiber quotes have been slipping lately with deals reported at these low levels: Polyester blending staple (78¢/lb, off 2-4¢/lb from recent levels); rayon staple (83-86¢/lb, off 1-3¢/lb); 150-denier polyester feeder yarns (82-87¢/lb, off 3-4¢/lb); and 40-denier nylon filament yarn ($1.85-1.90/lb, off as much as 5¢). Blame it on a combination of (1) less buoyant demand, (2) recent declines in raw cotton which have put pressures on both rayon and polyester staple, and (3) imports which have hurt domestic filament yarns. Also indicative of softness is that manmade operating rates have dropped from 85% in May to near 78%.

Manmade fiber prices
(Index: 1967 = 100)



Steel

Imports continue to roll in with well over 16 million tons entering the country over the first eight months of the year. The figures confirm recent estimates of a 22 million ton import year, close to 30% above '83 levels. Price is the main reason as a buoyant dollar pushes domestic lists more than $100/ton above comparable imports in many product lines. One result is disappointing domestic shipments. Even with a seasonal fall pick-up, fourth quarter totals will be lucky to hit 19 million tons, some 1.5 million under the tonnage shipped during the April-June quarter.

1985 fleet car recommendations

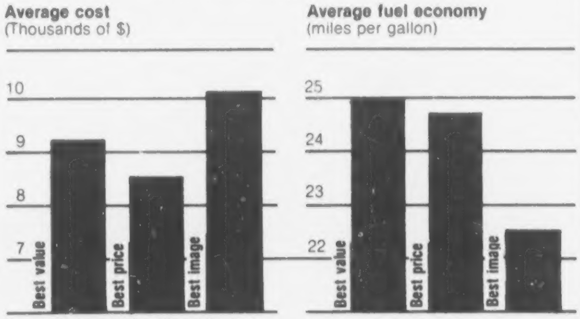
'Tis the season for new car models—and here's what the experts at Peterson, Howell & Heather (PH&H), a big Maryland-based leasing firm), are telling their clients:

- **Best value**—reflecting a combination of fuel economy, original cost, resale value, interior size, comfort, trim levels, and trunk space: Buick Skylark Custom (X) 4-door, Buick Somerset Regal (N) 2-door, Chevrolet Celebrity CL 2 & 4-door, Dodge Lancer 2 & 4-door, Oldsmobile Calais 2-door, and Pontiac 6000 2 & 4-door.
- **Best price group**—for those looking for the lowest possible acquisition cost without size penalties: Chevrolet Cavalier CS 2 & 4-door, Chevrolet Citation 2 & 4-door HB, Dodge Aries 2 & 4-door, Ford Tempo GL 2 & 4-door, Mercury Topaz GS 2 & 4-door, Plymouth Reliant 2 & 4-door, and Pontiac Sunbird 2 & 4-door.
- **Best image group**—for firms that use a company car for its recognition, an inducement to employment, or an indication of status: Buick Century Custom 2 & 4-door, Chrysler N-body 4-door, Ford Thunderbird 2-door, Mercury Cougar 2-door, Olds Cutlass Ciera LS 2 & 4-door, and Pontiac 6000 LE 2 & 4-door.

PH&H analysts say 1985 prices will increase over 1984 prices, including cost increases during the model year, by about 5%.

The firm recommends 4 cylinder cars to cut fuel costs. For example: the 2.5 mpg average difference between fours and sixes turns into $391.50 in fuel savings over a 27-month service life. Also a six adds more than $200 to the cost of a new car—and most of this is not recovered at resale.

1985 car model summary

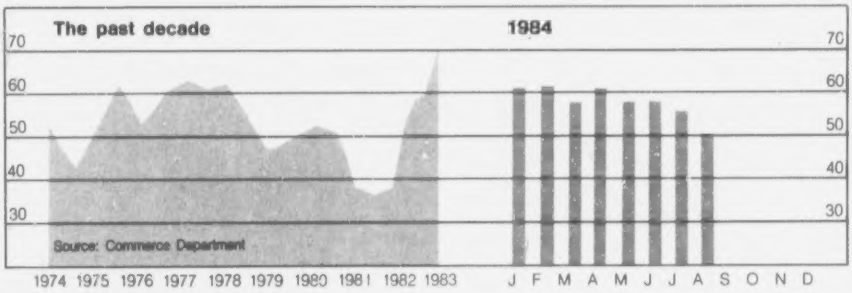


Source: Peterson, Howell and Heather

BUSINESS DATATRAK

NAPM business barometer

Based on five indicators (employment, inventories, new orders, production, vendor performance)



Source: Commerce Department

KEY ECONOMIC TRENDS

Growth slower, but still strong

Business may finally be ready to slow down a bit.

The NAPM Business Barometer at latest report had slipped to 51.5, marking the second straight month of sizable decline. But this key indicator is still above the neutral "50" level, suggesting further production and GNP gains still loom ahead though they are not likely to be as robust as those of earlier this year.

There are also some very reassuring signs that the economy, while obviously decelerating, will remain solidly in the plus column into early 1985.

It is difficult to shrug off such factors as:

Beefed up business spending: The accompanying chart depicts trends in capital appropriations, a leading indicator of plant and equipment outlays. The latest reading shows a hefty 38% jump, marking the fifth successive quarterly increase in this bellwether series.

The Conference Board, compiler of these figures, adds that for all of 1984, the nation's largest manufacturers project a 20% climb in appropriations, with actual spending expected to be up by an even more impressive 25%. With modest price boosts, the real or physical gain looks almost as large.

Still high durable goods orders: While totals are now a bit under the early '84 peak, they remain a strong 12% above a year ago. Orders are continuing to come in at a faster clip than they are being shipped out. The result is a rising backlog, particularly in the auto, defense, and nondefense capital goods sectors.

These rising backlogs should assure continued production increases, even if orders should begin to taper off. Fourth quarter production projections now making the rounds all point to continued output gains, with the actual advance put at a 6% annual rate.

Tight inventories: The actual figures are detailed in the inventory article in this section. Generally, stocks are trim at virtually every level, indicating there is little danger of any living off inventory fat which could crimp the near-term growth trend.

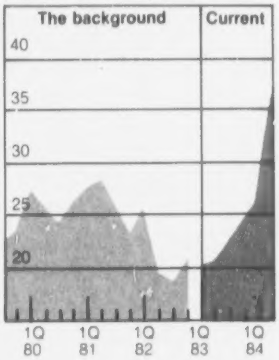
There are, however, a few points of concern. Consumer buying plans have turned down, but it would take a few more months of slippage before a significant trend could be verified.

Consumer buying habits will bear close watching, especially if, as expected, interest rates stay high.

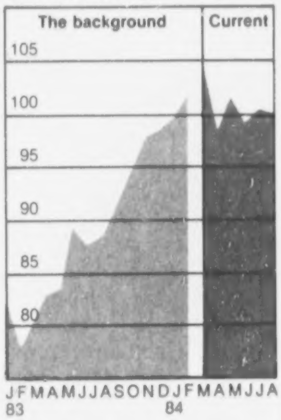
These rates are already having some impact on the housing market with new starts expected to slacken off to a near 1.7 million annual rate in the upcoming fourth quarter which is well under the 1.9 million plus rate for the first six months of the current

Leading indicators

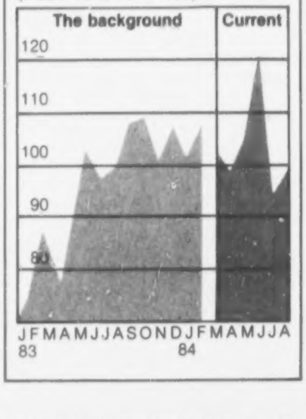
1. Capital appropriation
(Billions $, seas. adj.)



2. Durable goods orders
(Billion $, seas. adj.)



3. Consumer buying plans
(Index: 1969-70 = 100)



year.

But this is still a respectable pace. When added to other positive factors (still strong auto sales, the defense buildup, and an improving capital goods market), it is not hard to remain optimistic about the next few quarters. Hence these updated ***Purchasing World*** GNP growth projections: 3.5% at annual rate over the last three months of 1984 and a smaller 3% gain for the upcoming January-March period.

If all goes according to plan, we may see a third complete year of uninterrupted growth in 1985, with the real GNP averaging about 3% above this year which will follow the 3.7% and 7.5% gains of 1983 and 1984.

Hard to ignore imports these days

There are still plenty of import bargains around. And with good reason.

Ever since Uncle Sam began tracking import prices in late 1982, they have been out-performing comparable domestic averages. Although the gap has been small in most quarters, the totals are beginning to add up. Note, too, that over the last quarter there have been decreases in some product lines.

The situation looks like this:

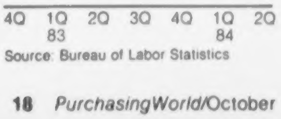
Crude materials: Averages dropped 0.6% in the last quarter, after rising 4.7% the previous period. Tags on wood (up 7.1% in the previous quarter) plummeted 10.1%. Crude rubber dropped 6.3%, while minerals declined 3.8%. Packaging materials helped push pulp and waste paper up 9.7%.

Chemicals: Averages dropped 0.4%. Fertilizer quotes rose 1.7%, but most other categories were down.

Machinery and transport equipment: This is mixed picture. Prices of imported autos, specialized machinery (textile, farm, civil engineering), and VCRs are up. Most telecommunications equipment fell, as did electrical machinery (-3.2%), office machines (-1.1%), and metalworking machinery (-0.4%).

How import prices stack up

Import vs domestic prices
(% change)

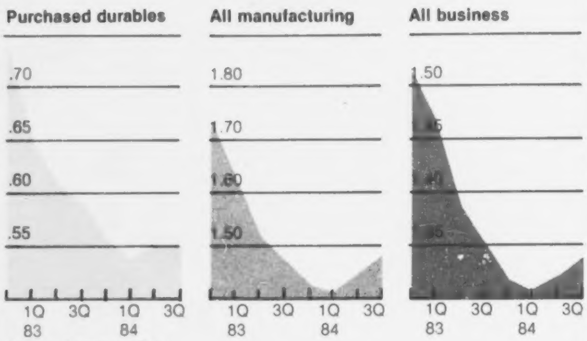


Source: Bureau of Labor Statistics

Import % change
(2Q 84 vs 1Q 84)

Fuels	–0.3%
Chemicals	–0.4%
Paper & board	1.6%
Textiles	–0.5%
Steel	4.4%
Nonferrous	1.4%
Fasteners	0.9%
Motors & generators	0.3%
Metalworking machinery	–0.4%
Bearings	–0.3%
Electric machinery	–3.2%
Instruments	–1.3%

Inventories: 3 views
(stock-sales ratio)



Source: Commerce Dept.

Intermediate products: Averages jumped 1.5%. Much of the increase was in steel (4.4%), nonferrous metals (1.4%), and paper/paperboard products (1.6%). Declines were posted in textiles (0.5%), non-metallic mineral manufactures (1.1%), and rubber products (0.7%).

No sign of dangerous buildup

It is a "no sweat" inventory situation across the board.

True, the sharp declines in stock/sales ratios have ended (see chart). But as of now there is no sign of any dangerous buildup. All key ratios are well under the peaks of late 1982.

Perhaps the best showing is in purchased durable materials. The stock/ sales ratio (a measure of PMs days' supply) has dropped more than 25% in less than two years and is now near its all time low.

Judging from a recent survey (*PW* Sep 1984, pg. 86), purchasing executives intend to keep it that way. Their responses indicated that some 60% would still like to see lower days' supply compared to about 15% who felt levels were too low.

Talks with buyers suggest a combination of factors behind this "keep 'em lean" strategy. Foremost is today's high carrying charges.

Several other factors are suggested, including (1) still more-than-ample capacity in most areas, (2) relatively steady prices, (3) improved inventory controls, (4) increasing reliance on distributors to fill holes, and (5) the continuing trend toward long-term contracts to reduce the threat of supplier delivery delays.

Many of these same factors also seem to be affecting the inventory thinking of suppliers, wholesalers, and even retailers. Thus the all-business inventory/sales ratio has been falling at approximately 12%.

This is a healthy sign, ruling out the inventory excesses that aborted so many recent business recoveries.

CURRENT PRICES

Prices down, softness in energy

It may seem hard to believe, but industrial prices actually slipped this past month, dropping 0.2%. Current averages are only about 2% above a year ago, a remarkable performance considering industrial demand has jumped more than 10% over the same period.

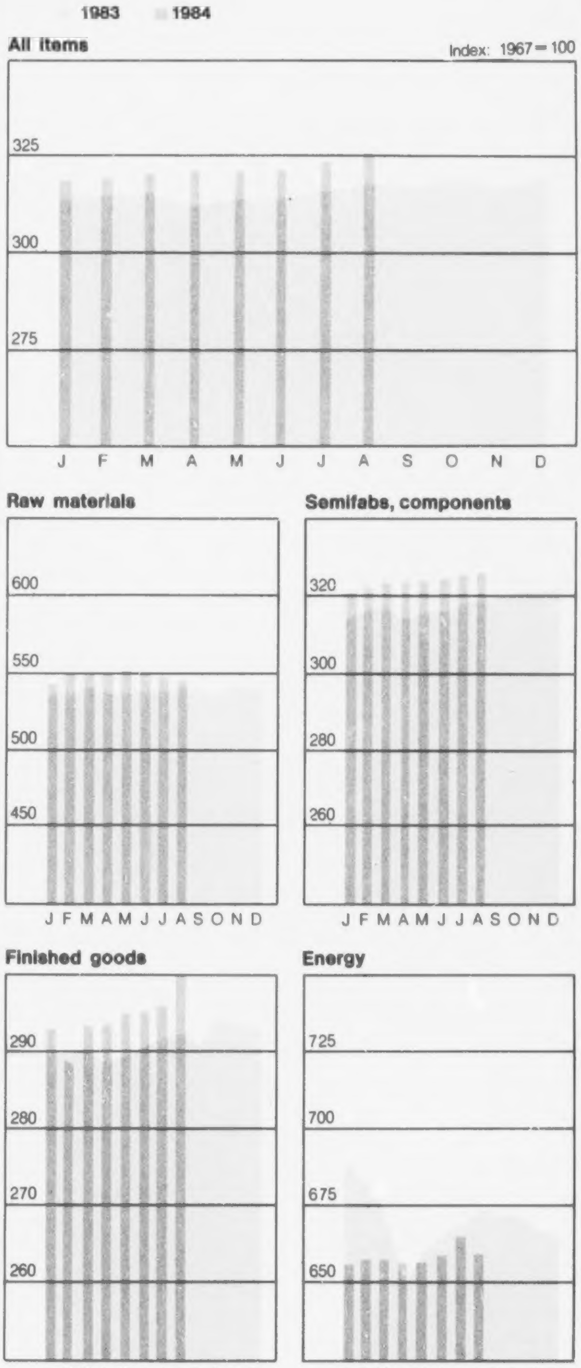
Much of this month's good showing can be credited to the energy sector where declines were reported in gasoline, home heating oil, diesel fuel, kerosene, and liquid petroleum gas, more than outweighing some modest upcreep in natural gas and electricity.

Organic chemicals also

This month's breakdown

	Latest level (August)	% change from: Month ago	Year ago
Bearings	343.6	0.1	3.7
Bolts, nuts, etc	277.1	−0.5	4.3
Chemicals, inorganic	294.2	0.1	0.9
Chemicals, organic	364.0	−1.8	−2.9
Concrete products	311.2	0.2	2.8
Corrugated cartons	264.7	0.8	9.2
Cutting tools, small	281.1	0.1	1.1
Electric lamps (bulbs)	332.7	−1.1	6.1
Electronic components	193.1	0.4	4.0
Fans and blowers	351.4	0.1	4.1
Foundry and forge products	362.0	0.2	3.0
Fuel oil (residual)	1152.9	−0.6	6.6
Furniture, commercial	298.4	0.2	4.2
Gasoline	555.1	−3.1	−11.2
Glass, flat	217.8	−4.2	−5.2
Glass containers	366.0	−0.3	4.2
Gypsum products	352.9	−2.1	22.0
Hand tools	359.1	0.3	2.7
Hand tools, power driven	224.1	−0.1	1.4
Industrial furnaces	376.0	0.4	3.6
Integrating and measuring instruments	229.2	−0.6	3.4
Internal combustion engines	154.1	−0.1	−0.2
Lubricating oil	797.8	0.0	2.8
Lumber millwork	306.1	0.1	−0.2
Material handling equipment	290.3	0.4	1.8
Metal containers	352.4	1.1	4.7
Metal mill shapes (nonferrous)	321.3	−0.5	2.9
Metal tanks	306.1	−0.1	0.0
Motors and generators	340.3	0.0	1.6
Motor trucks	281.7	−0.2	4.1
Office and store equipment	154.1	−0.1	−0.2
Paperboard	285.4	2.3	14.1
Paper boxes and shipping containers	264.1	0.1	6.7
Paper office supplies	243.6	0.0	7.4
Paint	276.4	0.8	4.1
Plastic resins	309.4	−0.2	5.3
Precision measuring tools	253.3	0.0	3.1
Pumps and compressors	348.1	−0.5	0.7
Refractories	362.7	−0.1	6.9
Rubber belts and belting	348.9	−0.3	7.6
Scales and balances	232.3	0.5	1.6
Steel products	364.9	0.1	4.6
Switchgear	274.5	−0.2	0.3
Textiles, synthetic fibers	159.9	−0.1	1.5
Textiles, gray fabrics	154.4	0.2	5.2
Tires and tubes	244.1	0.0	0.5
Transformers and power regulators	228.0	0.0	2.0
Welding equipment	281.7	0.0	1.4
Wire and cable	202.0	0.4	−1.2

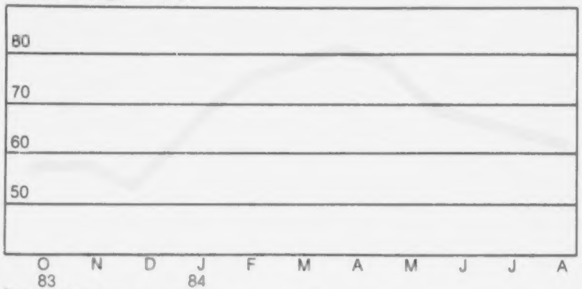
Industrial prices



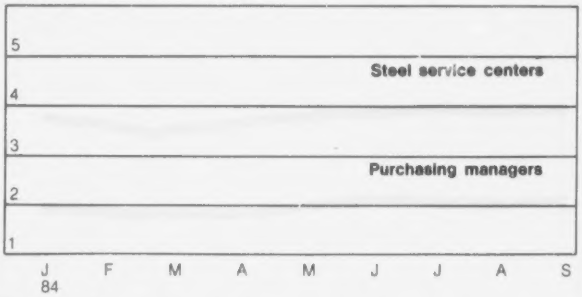
Source: Bureau of Labor Statistics

Steel

Operating rates



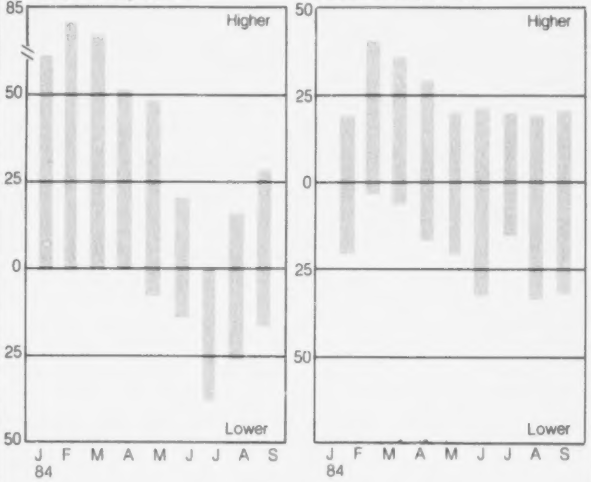
Inventories (months supply on hand)



Demand

Service center incoming orders
Percent of respondents

Steel buyer purchases
Percent of respondents



Import prices (compared to domestic)

Steel buyers

Above	0%
Same	21%
Slightly below	73%
Substantially below	6%

Service centers (carbon

Above	0%
Same	8%
5-10% below	77%
10-20% below	15%
Over 20% below	0%

Source: Steel Service Center Institute, NAPM Steel Buyers Committee

remain weak with quotes off more than 2% over the past month, and 3% under year-earlier levels. The weakness has also spread to some plastic resins where declines in polyethylene and PVC also put this key material in the negative column.

Metals have not been buoyant either, with recent softness noted in aluminum, lead, zinc, and steel.

The only basic raw materials that showed some strength this month were building materials (overall advance of 0.2%) where cement, asphalt, lumber, paint, and environmental controls all rose, offsetting declines in flat glass, gypsum, and plastic construction materials.

Machinery was also moderate, despite rather sharp pickups in capital equipment buying. Machine tool and mining machinery edged higher, but these were offset by declines in heavy trucks, chemical and plastic industry machinery.

Other evidence of moderation is a Commerce Department report comparing demand gains in both dollars and physical volume which suggested only a 1% increase in 1984 price averages.

Perhaps the best indication of a continuing buyer's market is the pervasiveness of the current softness. A tally of 50 or so commodities monitored regularly by ***PW*** shows about 20 of them in the negative column in the past month, a performance not seen since the 1982 recession depths.

STEEL SCENE

Buyers not all that bullish

The fourth quarter is not shaping up well for the steel industry.

Buyers queried in the latest NAPM Steel Survey report reduced bullishness with their steel requirements. More contemplate tonnage declines (31%), than contemplate increases (22%).

Distributors responding to a new Steel Service Center Institute (SSCI) survey are only slightly more optimistic. More see an increase (29%) in their incoming orders than see decreases (21%), a gap of only 8 points compared to January, February, and March when the gaps were 80, 75, and 52 points, respectively.

Another indication of service centers' caution is that some 98% of members surveyed say they will maintain the same level of reduced inventories over the next three months, with 74% of these saying they plan reductions.

Inventory caution also appears on the steel buyers' front with 53% planning on reductions and none planning additions.

This could be just talk on the part of the buyers and service centers. Holdings in both instances are not that out of line with current usage patterns. Months' supply figures (see chart) are only slightly higher than they were in late 1983 and early 1984. There does not appear to

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be any significant buildup.

Not everyone seems to be as concerned as the survey would indicate. SSCI president Andrew G. Sharkey remains cautiously optimistic. As he says, "while the decline in flat rolled steel products was slightly higher than anticipated, the recent hiatus was expected and should not be cause for concern. If you look at the year-to-date, we're still almost 30% ahead of a year ago."

He also points out that the appliance industry is in the midst of a record year and, if the market demand pattern continues, 1984 will surpass the previous best peak by 1.5 million units.

But much of the production will be coming from imports as the industry heads for a peak 22 million ton import year.

Prices remain the major impetus for this import surge. At latest report, some 92% of service center respondents said foreign carbon steel was moving below domestic rates, with 15% of them saying the break was over 10%.

In stainless the figures are equally impressive, with 81% noting foreign bargains and 25% of them putting the advantage over 10%.

Buyers seem to be in the driver's seat with 79% noting bargains, 6% labeling them "substantial."

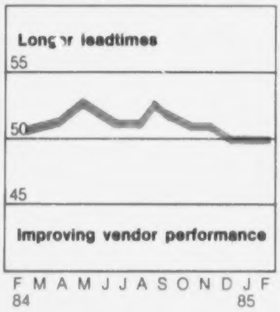
Availability is another factor. Only a few spotty problems were noted by steel users and most of these were centered on coated sheet. Fears of future shortages were running at half of what they were a few months ago.

Steel service centers are even more confident about supplies. Not one grade of steel is currently on the problem list—a sharp contrast to last June when some problems were noted in 9 of the 14 metal categories monitored by SSCI.

Monthly procurement status report

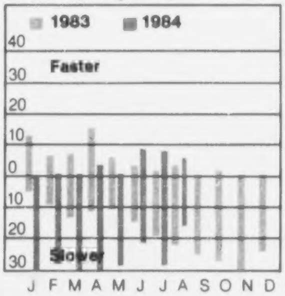
Leadtime index

A 'diffusion' index based on 158 key commodities. Above '50' indicates a tendency for leadtimes to stretch out. Below '50' suggests improving vendor performance.

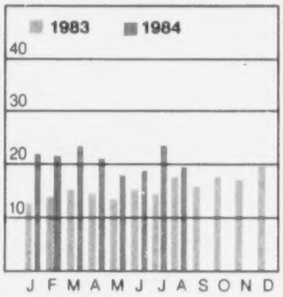


Delivery performance

Percent reporting deliveries

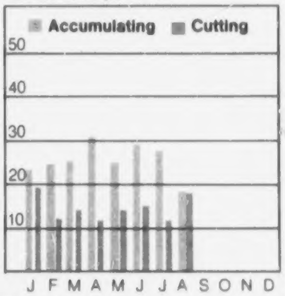


Forward commitments



Inventory strategy

Percent of respondents



Source: NAPM

PROCUREMENT STATUS

PW index neutral for third month

Early fall doesn't seem to be bringing much of a change from summer vendor leadtime performance.

Thus *PW's* exclusive leadtime index remains squarely at the neutral "50" level for the third month in a row—a pretty good indication that any remaining stretchouts are being completely offset by shrinkages in other areas.

Even some of the earlier problem areas seem to be disappearing. Previous tightness in steel and aluminum is now only an unpleasant memory. While semiconductors remain tight, the situation is not nearly as critical as it was a few months ago.

Another indication of a somewhat easier situation is that only 15% of the buyers responding to the latest NAPM survey report slower deliveries—down from the 20% and higher figures for the last two months.

PMs are reflecting this improved procurement climate by slowing down on forward commitments. Last month only 20% committed 90 days or more in advance for production materials. And 15% said that they were buying hand-to-mouth, up from the 12-13% readings posted for the previous two months.

Inventory policies also reflect an improved situation. For the first time this year the same number of buyers were paring as were adding to stocks, suggesting that purchasing manager worries have subsided a bit.

This encouraging picture is also confirmed by factory operating rates which, despite all the recent demand gains, remain several points below the 85% level that traditionally separates a buyer's from a seller's market.

Leadtimes and availability

Chicago: Some stretchout in coated/galvanized steel (to 10 weeks) and structurals (to 3-6). In a bit are aluminized sheet (to 5), aluminum coil and sheet (to 10-12), chrome chemicals (to 1-2), and PVC resin (to 1). No change in copper products or electronic components.

Cleveland: Not all that much change here. Most alloying materials are available on demand. Also holding steady (in weeks) are glassine papers (4-5), lumber (3), skids (3), plastic packaging material (2-3), strapping (2-3), corrugated boxes (3), and aluminum (14).

Los Angeles: Semiconductors have come in considerably (to 12 weeks), as have passive components (to 18). No change in other electric parts or for galvanized steel (12-16), copper fittings (3-5), pumps (8-10), fasteners (6-8), and paint (3-5).

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Houston: Small but mixed changes here. Centrifugal pumps are in to 10-12 months. Stretching a bit are heat exchangers (to 6-14 months) and turbogenerators (to 6-15 months). All metals are generally available in 2 weeks or less, MRO items in 2-3 weeks, chemicals in 0-1 weeks.

Philadelphia: Modest stretchouts for titanium (to 14 weeks) and high temperature metal strip (to 10 weeks). Little change in other metals with these weekly waits: carbon sheet (1-2), carbon plate (3-4), structurals (2-6), copper and brass products (4-5), and stainless strip (6-8).

Pittsburgh: Manganese has come in to 4 weeks (from 8) as more material surfaces. Little change in other alloying materials with these weekly waits: lead (2), magnesium (4), nickel (2), silicon (4), and tin (4). Paint is available in 4-5 weeks, polyethylene in 5, and polyvinyl chloride in 6.

Leadtimes (in weeks)

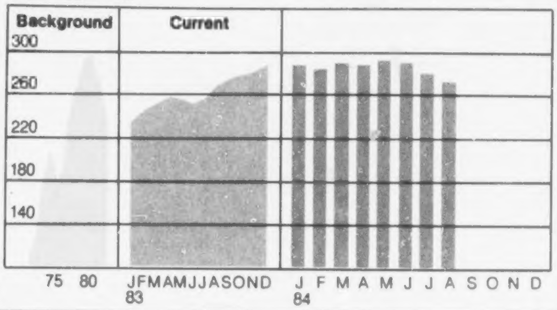
	Now	Month ago	Six months ago
STEEL			
Sheet (Phil)	9	9	9
C-R Sheet (Chgo)	5	5	8
Plate (Phil)	10	10	10
Plate (Chgo)	2½	2½	6
Reinforced (Hous)	6	6	6
H-R Bars (Phil)	7	7	7
H-R Bars (Chgo)	3	3	3
Cold-Drawn Bars (Phil)	7	7	4½
Galvanized (LA)	14	14	20
Galvanized (Chgo)	10	6	9
Structurals (Chgo)	4½	3½	2½
Structurals (Hous)	17	17	17
Tubing (Phil)	7	7	7
Grey Iron Castings (LA)	5	5	6
Steel Castings (Hous)	11½	11½	11½
Forgings (Hous)	6	6	5
Pipe, Carbon (Hous)	13	13	13
ELECTRIC & ELECTRONIC			
Cables (Chgo)	8½	8½	8½
Capacitors (Chgo)	17	17	16
Circuit Breakers (Chgo)	6	6	6
Electromech. Devices (LA)	7	7	9
ICs (Linear) (Phil)	20	20	20
Motors (Phil)	15	15	21
Motors, 1000 hp & Up (Hous)	39	39	39
Printed Circuit Boards (Chgo)	20	20	17
Relays (Chgo)	15	15	15
Resistors (Chgo)	14	14	10
Resistors, Wirebound (Phil)	10	10	10
Transformers (Chgo)	10	10	10
LUMBER			
Hardwood (Pgh)	3	3	3
Hardwood (Clev)	3½	3½	3½
Plywood (Chgo)	2	2	1½
Plywood (Phil)	1½	1½	1½
Softwood (Clev)	3	3	3
Softwood (Phil)	⅕	⅕	⅕
Softwood (Pgh)	3	3	3
Particleboard (Phil)	2½	2½	2½
CHEMICALS-PLASTICS			
Adhesives (LA)	½	½	½
Napthalene (Chgo)	2	2	2
Paint (LA)	5	5	4
Paint, Coil Coating (Pgh)	4	4	4
Paint, Maint. (Cleve)	3½	3½	3
Polyester Resin (LA)	2	2	2
Polyethylene Resin (Cleve)	3	3	3
Polyethylene Resin (Pgh)	4	4	4
PVC Resin (Chgo)	1	1	2
PVC Resin (Pgn)	6	6	4
Titanium Dioxide (LA)	1	1	1
PACKAGING			
Bags, Kraft (Pgh)	5	5	5
Bags, Multiwall (Clev)	9	9	9
Bags, Multiwall (Pgh)	6	6	6
Cartons, Corrugated (Cleve)	3	3	3
Cartons, Corrugated (Hous)	3	3	3
Cartons, Folding (Phil)	6½	6½	6½
Cartons, Folding (Pgh)	3½	3½	3½
Cellophane Wrap (Phil)	5	5	5
Plastic Bags (Pgh)	3½	3½	3½
Plastic Pkg. (Pgh)	3	3	3
Shrink Film (Chgo)	4	4	4
Shrink Film (Clev)	3	3	3
Drums, Fiber (Pgh)	1	1	1
Drums, Steel, Std. (Pgh)	1	1	1
Wood Pallets (Chgo)	2½	2½	2½
Wirebound Boxes (Pgh)	4½	4½	4½
Strapping (Clev)	2½	2½	2½
Strapping (Pgh)	3	3	3
PAPER			
Fiberboard (Clev)	3½	3½	3½
Glassine (Clev)	4½	4½	4½
Glassine (Pgh)	5½	5½	5½
Groundwood (Clev)	4½	4½	4½
Groundwood (Pgh)	7	7	7
Kraft (Clev)	1	1	1
Kraft, Bleached (Clev)	1	1	1
Kraft, Bleached (Pgh)	5	5	5
Kraft, Natural MFNS (Clev)	1	1	1
Laminated (Clev)	8	8	8
Tissue (Pgh)	5½	5½	5½
NON-FERROUS			
Aluminum Coil (Chgo)	11	13	15
Aluminum Plate (Chgo)	14	14	9
Aluminum Sheet (LA)	4½	4½	4½
Aluminum Sheet (Chgo)	11	13	15
Brass Castings (LA)	7	7	7
Brass Rods (Chgo)	6	6	3½
Brass Sheet (Chgo)	9	9	15
Brass Tube (Chgo)	5	5	9
Copper Fittings (LA)	3½	3½	3½
Copper Mill Prod. (Pgh)	6	6	6
Copper Tube (LA)	5½	5½	5½
Copper Tube (Phil)	6	6	6
Lead (Pgh)	2	2	2
Magnesium (Pgh)	4	4	6
Manganese (Clev)	1	1	1
Nickel (Clev)	1	1	1
Nickel (Pgh)	2	2	2
Silicon (Clev)	1	1	1
Tin (Pgh)	3	3	3
Wire, Specialty (LA)	5	5	6
Zinc (Pgh)	2	2	6
MISCELLANEOUS			
Bearings, Domestic (Phil)	22	22	12
Bearings, Foreign (Phil)	26	26	26
Boilers & Furnaces (Hous)	35	35	35
Compressors, Centrifugal (Hous)	50	48	52
Compressors, Reciproc. (Hous)	39	39	43
Fasteners (Chgo)	1½	1½	1½
Fasteners (LA)	7	7	6
Fasteners, Std. (Phil)	2½	2½	2
Heat Exchangers, Carbon-alloy Steel (Hous)	20	20	20
Heat Exchangers, Hi-pressure (Hous)	35	43	21
Insulation Mat'l. (LA)	7	7	7
Machined Parts (Hous)	9	9	9
Pipes & Valves (Chgo)	2	2	2
Pumps (Hous)	35	35	39
Pumps (LA)	9	9	9
Rubber, Synthetic (LA)	2	2	2
Rubber Hose (LA)	4	4	4
Tungsten Carbide Parts (Hous)	15	15	15
Valves, Cast Steel (Hous)	17	17	6½
Welding Supplies (Hous)	5	5	5

BUSINESS DATATRAK

Raw material price barometer

Latest month	274.6
Month before	280.1
Year ago	265.2

Index: 1967 = 100



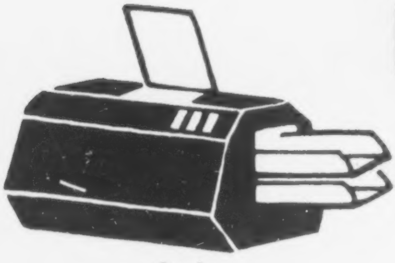
Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer. Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	367.00	367.00	347.00
Steel, structural shapes, Pitts., cwt.	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt.	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt.	24.40	24.40	24.40
Steel, bars, dlvd. Phila., cwt., merchant quality	23.95	23.95	17.50
Steel, bars, Pitts., cwt.	23.95	23.95	17.50
Steel, bars, C.R., Pitts., cwt.	29.25	29.25	26.00
Steel, plates, Pitts., cwt.	23.25	23.25	25.75
Steel, plates, H.R., Pitts., cwt.	23.25	23.25	25.75
Steel, sheets, C.R., Detroit, cwt.	27.10	27.10	26.15
Steel, strip, C.R., Chi., cwt.	35.30	35.30	29.05
Steel, basic wire, Pitts., cwt.	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	0.495	0.553	0.762
Antimony, in alloy, lb.	2.00	2.00	2.00
Beryllium-copper, cost ingot, lb.	5.20	5.20	4.95
Brass, red, 85%, [sheet], lb.	1.26	1.23	1.27
Brass, yellow, [sheet], lb.	1.21	1.18	1.21
Cadmium, ton lots, lb.	1.55	1.55	1.25
Copper, electrolytic, wire bars, refd., lb.	0.65	0.62	0.73
Copper sheet, over 24 in., lb.	1.35	1.32	1.36
Lead, common, N.Y., lb.	0.260	0.280	0.200
Magnesium, pig ingot, [99.8%], lb.	1.48	1.48	1.38
Mercury, 20 fl. lots, N.Y., fl.	308.00	295.00	288.00
Molybdenum Climax Oxide/bags, lb.	4.65	4.65	4.65
Nickel, electrolytic, producer, lb.	3.20	3.20	3.20
Platinum, producer, oz.	475.00	475.00	475.00
Silver, N.Y., oz.	7.20	7.67	12.20
Tin, Straights, N.Y., lb.	6.20	6.28	6.43
Zinc, Prime West, East St. Louis, lb.	0.48	0.48	0.46
Zinc, die casting alloy, No. 3, lb.	0.545	0.555	0.525
PAPER			
Uncoated book #3 offset, ton	850.00	850.00	680.00
Watermarked bond, ton	985.00	985.00	845.00
Gummed sealing tape, carton	15.65	16.02	15.44
Boxboard, mach. clay ctd. recycled sheets 80 bright, .016, ton	495.00	495.00	475.00
Wrapping paper, std. distributor cost, kraft, basis wt. 50 lb., roll	28.00	28.00	28.00
Kraft linerboard. 42 lb., unbleached, ton	350.00	350.00	290.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd.	0.359	0.339	0.262
Cotton drill, 1.85, 59", 68x49, N.Y., yd.	1.04	1.04	1.00
Cotton middling, 1", N.Y., lb.	0.622	0.622	0.732
Printcloth, 48", 80x80, N.Y., spot. yd.	0.77	0.76	0.66
Army duck, 37", 13 oz., yd.	1.91	1.91	1.63
Blended printcloth, 64", 78x54, yd.	0.77	0.77	0.72
20s combed yarns	2.10	2.10	1.78
Wool tops, N.Y., lb.	3.60	3.60	3.60

	Latest price	Previous month	Year ago
CHEMICALS			
Acrylonitrile, tanks, lb.	0.455	0.455	0.430
Ammonia, anhydrous, fertilizer, wholesale, tanks, ton	210.00	210.00	150.00
Benzene, petroleum, tanks, Houston, gal.	1.28	1.28	1.50
Caustic soda, 76% solid, drums, carlots, cwt.	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb.	0.58	0.58	0.58
Formaldehyde, USP, 37% [12% to 15% meth.], tanks, lb.	0.106	0.106	0.106
Glycerine, synthetic, tanks, lb.	0.81	0.81	0.73
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	0.54	0.54	0.48
Naphthalene, crude, tanks, lb.	0.22	0.22	0.22
Phthalic anhydride, tanks, lb.	0.305	0.305	0.305
Polyethylene resin, low density liner film grade (market price), lb.	0.410	0.410	0.380
Polypropylene, homopolymer grade (market price), lb.	0.400	0.400	0.360
Polystyrene, general purpose grade (market price) lb.	0.41	0.41	0.38
Shellac, bone dry, N.Y., lb.	1.65	1.65	1.65
Soda ash, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	0.35	0.35	0.34
Sulphur, crude, ex-terminal, Tampa, Fla., lt.	147.50	140.00	132.50
Sulphuric acid, 66%, commercial, tanks, ton	56.85	56.85	56.35
Titanium dioxide, anatase, reg., carlots lb.	0.69	0.69	0.69
Xylene tanks, gal.	1.33	1.33	1.33
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	312.75	307.55	335.10
Lumber, 2x2, pine, mbf, cl	298.15	301.65	345.10
Plywood, plyform, ¾", msf, cl	576.80	567.70	561.40
Plywood, ⅝", msf, cl	373.05	364.05	363.25
Cement, bulk, ton, tl	63.75	63.75	61.80
Sand, ton, cl	6.07	6.07	5.95
Ready-mix concrete, 3,000 psi/cu.yd., 15 cu. yd.	46.87	46.73	45.73
Crushed stone, 1½", ton, cl	7.27	7.53	7.90
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.78	0.77	0.75
Gypsum sheathing, ½"x1"x8", msf, tl	205.57	204.57	163.90
Brick, common, per thousand, tl	173.08	173.08	171.95
Asphalt paving, AC-20	169.53	168.86	158.58
Concrete sewer pipe, 12", prem. joint, per foot, cl	7.04	7.04	6.69
FUELS			
Fuel oil, No. 6 or Bunker C, Gulf., bbl.	26.25	26.00	26.00
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	30.50	30.50	31.75
Gasoline, 91 oct., reg., Los Angeles, rack, gal.	0.740	0.730	0.790
Gasoline, 94 oct., reg., Chi., tank car, gal.	0.796	0.771	0.870
Heating oil, No. 2, Chi., bulk, gal.	0.795	0.785	0.848
Heating oil, No. 2, N.Y., bulk, gal.	0.808	0.773	0.868
Heavy fuel. PS 400, Los Angeles, rack, bbl.	26.50	26.50	26.25
Jet kerosene, gal.	0.780	0.760	0.830
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	0.411	0.405	0.490
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	87.00	82.00	83.00
Steel, No. 1, hvy., dlvd., Chi., ton	80.00	77.00	77.00
Copper, No. 1, East, wholesale buy, dlvd., lb.	0.550	0.550	0.685
Copper, No. 2, East, wholesale buy,	0.470	0.465	0.598
Brass, red, East, wholesale buy, dlvd., lb.	0.515	0.510	0.645
Brass, yellow, East, wholesale buy, dlvd., lb.	0.360	0.350	0.360
Alum., old sheet/cast, E., wholesale buy, dlvd., lb.	0.340	0.345	0.490
Alum., mixed clip., E., wholesale buy, dlvd., lb.	0.360	0.370	0.510
Zinc, old, East, wholesale buy, dlvd., lb.	0.200	0.200	0.145
Lead, clean solids, East, wholesale buy, dlvd., lb.	0.165	0.165	0.115
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	30.00	30.00	25.00
Paper, old corrug. box, dlr., N.Y., ton	25.00	25.00	20.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb.	0.12	0.12	0.100
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb.	0.34	0.37	0.34

[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]

PW's Business Data File



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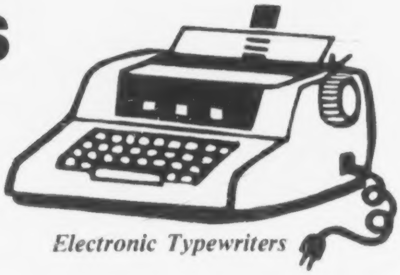
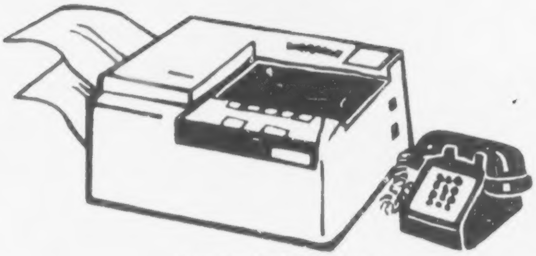


Electronic Typewriters



Facsimile Machines

Drop this into your electronic mail box: the automated office a.k.a. the office of the future is here today. Maybe not to the extent that pundits of the office pool have been predicting for some time, but nonetheless in a variety of forms, any and all of which can make the purchasing manager's job that much more complex.

That's why we feel this year's edition of *PW Business Data File* is even more valuable than ever before. Covering the three product areas of copiers, facsimile machines, and electronic typewriters, it is arranged in a format which we feel gives you, the reader and user, the maximum amount of useful information. Included are product specifications as well as important pricing information.

Our information is only as good as that provided to us by suppliers and should be regarded in that way. If you wish further information about the products of a particular company, you may want to use our convenient reader inquiry service. A reader service number is included with every company entry. If you want a complete list of companies in any category, simply write to us and we'll send you our working list complete with addresses and telephone numbers.

Earlier this year when *Management Technology* magazine conducted a survey of its readership, it came to the conclusion that end users (33% from senior management and 50% from middle management) were no longer interested in buying technology for its own sake. In the study done for *MT* by International Data Corp., more than half of the respondents were found to feel that such technologies were "strategically critical" to improved decision making.

Clearly the impact of office automation has moved into the realm of middle, and often, senior management. A recent study by Frost & Sullivan, for example, estimates that by 1988 there will be 4.8 million professional/executive workstations compared with little over a million in 1983.

The overall approach that is emerging in the effort to automate the office is building a local area network (LAN) so that many different kinds of compatible equipment can be integrated into the communications network.

Technologies that would function in such a network include laser printing for high volume reproduction, electronic file storage that can be shared between many workstations, electronic mail, intelligent copiers with communications, telecopier (fax) transmission of hard copies, and even communication of micrographics through the computer.

Here are some trends in both pricing and usage that *PW's* research discovered:

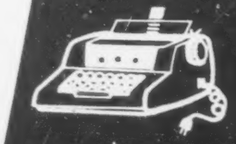
- The cost of word processing is coming down.
- Electronic typewriters with enhanced memories are approaching word processors in sophistication.
- Companies are coming into the personal computer market as fast as others are leaving it.

The risks for purchasing are fairly obvious: They include everything from the problem of buying equipment from suppliers with staying power and with proper service capability to making sure that equipment is indeed compatible within the network

The importance of this final point is just now becoming apparent. It is to avoid what some are calling the possibility of data fragmentation through the creation of separate, unconnected databases throughout the corporation. If ever the climate would be right for making decisions based on faulty information, that's the condition that could promote it.

Purchasing World is providing this listing to help you make decisions that will build that integrated and compatible automated future for your office within your company's framework and needs. ***PW***

Typewriters



Product profile												Company profile			Sales profile					Service profile					
Manufacturer & model	Mfr's suggested price ($)	10-pitch spacing	12-pitch spacing	Proportional spacing	Other spacing	Max paper width (in.)	Display (characters)	Correction memory (characters)	Internal memory (characters)	External memory	Year introduced	Annual sales (mil $)	Year founded	Primary business	Mfr-direct sales	Mfr-owned outlets	Distributors	Dealers	No. sales locations	Warranty period (mos.)	Mfr service contracts	Mfr-direct service	Mfr-authorized service	Other service	No. service locations
Adler, Div. of A.R.B.M (circle 336 on card)																									
Adler Satellite III	475	•	•		15	13.5		300			'84		1898	Electronic typewriters, copiers, other office machines				•	2,000	3	yes		•		2,000
Adler 310	695	•	•		15	14.2	40	500	2.5K	opt	'84														
Adler 1005/1005XL	895 +	•	•			16.5		132		opt	'82/83														
Adler 1020	1,050	•	•	•	15	16.5	40	500	2.5K	opt	'84														
Adler 1040/1035	1,595 +	•	•	•	15	16.5	40	4,000	16K	opt	'82/84														
Textriter Models 1/2	1,995 +	•	•		15	16.5	1920	30,000	64K	std	'82														
Brother International Corp. (circle 337 on card)																									
Compactronic 60	449	•	•		15	13.5		1 line			'83		1953	Typewriters and office equipment			•	•		V			•	•	
Executron 65/68	530 +	•	•	•	15	13.5	15	1 line	-/5K		'83/84														
EM series	800 +	•	•	•	15	16.5	15/16	2 lines		opt	'83														
EP series	350 +	•				8.75	15		-/4K	na	'84														
Canon U.S.A. (circle 338 on card)																									
AP 200/200X	645 +	•	•		15	16.5	15	350			'83/84														
AP 300/300X	795 +	•	•		15	16.5	15	350			'83/84														
AP 350/350X	945 +	•	•		15	16.5	15	350	2-16K	opt	'84														
AP 550	1,995	•	•	•	15	16.5	20	500	16-64K	opt	'81														
Conitronix Inc. (circle 339 on card)																									
CI Concorde 1200/1220		•	•	•	6, 15	17	20	500	-/4K		'84	2	1976	Electronic typewriters and printers			•			3	no		•		
CI Concorde 1900/2000		•	•	•	6, 15	17	20	500	8K/16K		'84														
Docutel/Olivetti Corp. (circle 340 on card)																									
ET 111	895	•	•	•	15	17	16	500		opt	'83		1908	Office automation											
ET 115	1,075	•	•	•	15	17	24	500	1835	opt	'83														
ET 225/5K	1,695	•	•	•	15	17	26	500	5K	opt	'82														
ET 225/64K	2,975	•	•	•	15	17	26	500	64K	opt	'83														
ETV 300/16K	1,695	•	•	•	15		1920		16K	opt	'83														
Exxon Office Systems (circle 341 on card)																									
210 Intelligent	950	•	•	•	15	17		500			'83		1981	Office automation equipment	•		•		140	3	yes	•	•	•	
215 Intelligent		•	•	•	15	17	20	650	9K		'84														
220 Intelligent		•	•	•	15	17	32	650	12-36K		'84														
Facit Inc. (circle 342 on card)																									
8121	2,499	•	•	•	15	19.25	40	500	40K	opt	'83		1938	Office systems				•	860				•		6
8105 KSR	1,599	•	•	•	15	19.25		1,000	2K		'82														
8001	1,099	•	•	•	15	19.25		330			'83														
7800	449	•	•			13		10			'83														

Hermes Products, Inc. (circle 343 on card)																									
16/19	425 +	•	•		15	13	0/40				'83/84	160	1921	Calculators and electric typewriters				•	400	12	no			•	
30	895	•	•		15	13		500			'84														
34	1,075	•	•	•	15	17	20	1,835			'84														
40/51 series	1,495 +	•	•	•	6, 15	17	20				'84														
Juki Office Machine Corp. (circle 344 on card)																									
3100/3200	349 +	•	•		15	13		20		opt	'84		1981	Typewriters	•		•	•	2,500	3		•	•		800
Olympia U.S.A. Inc. (circle 345 on card)																									
Mastertype	699	•	•		[1]	14.8		213		opt	'84		1906	Office equipment	•		•	•	1,200	3			•		1,200
ES 100 SC	799	•	•			13.2		8		opt	'83														
Startype	899	•	•	•	[1]	14.8	40	500	4K	opt	'84														
Professional	1,249	•	•	•	[1]	17.2		500	4K	opt	'83														
Supertype 2/Disk	1,499 +	•	•	•	[1]	17.2	20	500	16K	op/st	'83														
Panasonic Industrial (circle 346 on card)																									
KX-E601/E603	695 +	•	•		15	15.5	16/20	1 line	1K/3K	na	'84		1964	Office systems			•		325	6	yes		•		325
KX-E701/E708	895 +	•	•	•	15	15.5	-/40	500	1K/8K	opt	'83														
Royal, Div. of A.R.B.M. (circle 347 on card)																									
Royal Satellite III	475	•	•		15	13.5		300			'84		1898	Office machines				•	2,000	3	yes		•		2,000
Royal 410	695	•	•		15	14.2	40	500	2.5K	opt	'84														
Royal 5005/5005XL	895 +	•	•			16.5		132		opt	'82/83														
Royal 5020	1,050	•	•	•	15	16.5	40	500	2.5K	opt	'84														
Royal 5035	1,595	•	•	•	15	16.5	40	4,000	16K	opt	'84														
Royal 5040/5041	1,995 +	•	•	•	15	16.5	40	4,000	16K	op/st	'82														
Sharp Electronics (circle 348 on card)																									
ZX-330	595	•	•		15	13.5	15			na	'84	3,000		Office equipment and electronics				•	350	3			•		
ZX-415	895	•	•	•	15	17		450		na	'84														
ZX-505	1,295	•	•	•	15	17	32	400	16K	na	'82														
Swintec Corp. (circle 349 on card)																									
Collegiate	449	•	•		15	14.4		46			'84		1978	Electric typewriters				•	8				•		
1146CM/1186CM	549 +	•	•		15	14.4		46/full			'82/83														
8000	799	•	•	•	15	14.4		1 line	8K		'84														
Syntrex Inc. (circle 350 on card)																									
ET400	1,390	•	•	•	15	13.2		500			'84	41	1979	Office automation, word processing	•			•	100	3	yes	•	•		100
Libra	2,595	•	•	•	15	17		4K	40K	opt	'82														
Xerox (circle 351 on card)																									
610 Memory Writer	1,195	•	•	•	[1]	15		180	1,150		'81	8,800	1906	Office products and systems	•		•	•	300		yes	•	•		200
615 Memory Writer	1,395	•	•	•	[1]	15		180	5,450		'81														
620 Memory Writer	1,995	•	•	•	[1]	15	20	180	9,260		'81														
625/627	2,370 +	•	•	•	[1]	15	20	180	19K/31K		'81/82														
630/640	4,200 +	•	•	•	[1]	15	20/	180	[2]		'83/84														

V—Warranty period varies

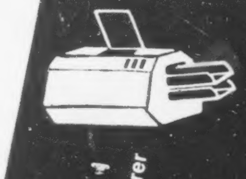
[1] *Other spacing available*

[2] *Limitless on 158,000 character diskettes*

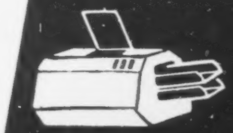
[3] *Franchised dealers*

[4] *Dealers only*

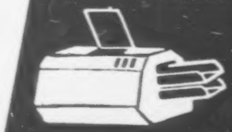
Copiers



Product profile									Company profile			Sales profile						Service profile				
Manufacturer & model	Mfr's suggested price ($)	Recommended monthly volume	Copies per minute	Sheet (S) or roll (R) fed	Plain (P) or coated (C) paper	Reduction capability	Rent or lease plan	Year introduced	Annual sales (mil $)	Year founded	Primary business	Mfr-direct sales	Mfr-owned outlets	Distributors	Dealers	Number of sales locations	Warranty period (months)	Mfr service contracts	Mfr-direct service	Mfr-authorized service	Other service	Number of service locations
A.B. Dick Co. (circle 353 on card)																						
955	1,995	5K	11	S	P	no	yes	'82	400	1884	Copy/duplicating	•	•	•	•	365	3	yes	•	•	•	365
965R	2,495	8K	13	S	P	yes	yes	'84														
985	2,595	15K	18	S	P	yes	yes	'83														
995R	3,695 +	40K	30	S	P	n/y	yes	'82/83														
Adler Royal Business Machines (circle 354 on card)																						
TA 210	1,695	3K	11	S	P	no	no	'84		1963	Typewriters, calculators, copiers				•	2,000	3	no		•		500
TA 211	1,995	6K	12	S	P	no	no	'83														
TA 218R	3,295	10K	12	S	P	yes	no	'83														
TA 230RE	4,995	30K	30	S	P	yes	no	'83														
Canon U.S.A. (circle 355 on card)																						
PC 10	795	500K		S	P	no	yes	'82	945	1955	Business office and photo equip				•	600	3	no				1,000
PC 20/PC 25	1,095 +	500K	8	S	P	n/y	yes	'82														
NP 150/NP 155	1,895 +	7.5K	15	S	P	n/y	yes	'84														
NP 270/270F	3,995 +	5K-30K	27	S	P	yes	yes	'83														
NP 400/400AF	5,995 +	8K-40K	40	S	P	yes	yes	'83														
NP 500AF	8,195	10K-50K	50	S	P	yes	yes	'83														
Eastman Kodak Co. (circle 356 on card)																						
Ekta-print 100	38,590	15K-250K	70	S	P	no	yes	'75	10,000	1880	Photographic sales	•				60	3	yes	•			60
Ekta-print 100P/100PS	43,560 +	15K-250K	70	S	P	no	yes	'79														
Ekta-print 250F/250AF	110,000 +	50K-500K	92	S	P	yes	yes	'82														
Gestetner (circle 357 on card)																						
2110	1,695	15K-30K	11	S	P	no	no	'84			Office equip & computer supplies	•			•	355		yes	•			
2000S/2002R/2112RE	2,695 +	10K	12	S	P	n/y/y	no	'83/84														
2007RE	4,495	20K	20	S	P	yes	no	'84														
2140RE	5,295	40K	40	S	P	yes	no	'84														
2045-R (Full System)	14,995	60K	45	S	P	yes	no	'83														
IBM (circle 358 on card)																						
Model 10/20	8,200 +	5K-20K	75	S	P	n/y	yes	'76	40,180	1914	Business equip	•					3	yes	•			147
Model 30/40/60	12,400 +	25K-100K	70	S	P	n/y/y	yes	'80/82														
Mita Copystar America (circle 359 on card)																						
DC-122		10K	12	S	P	no	yes	'83	116	1973	Copiers and supplies				•		3	yes		•		
DC-111		3K	11	S	P	no	yes	'84														
DC-211		15K	20	S	P	no	yes	'83														
Minolta (circle 360 on card)																						
EP 300/RE	1,895 +	2.5K/5K	12	S	P	n/y																
EP 450/450Z	3,495 +	20K	25	S	P	n/y																



Product profile									Company profile			Sales profile					Service profile					
Manufacturer & model	Mfr's suggested price ($)	Recommended monthly volume	Copies per minute	Sheet (S) or roll (R) fed	Plain (P) or coated (C) paper	Reduction capability	Rent or lease plan	Year introduced	Annual sales (mil $)	Year founded	Primary business	Mfr-direct sales	Mfr-owned outlets	Distributors	Dealers	Number of sales locations	Warranty period (months)	Mfr service contracts	Mfr-direct service	Mfr-authorized service	Other service	Number of service locations
Monroe Systems for Business (circle 361 on card)																						
RL-710	1,695	3K	11	S	P	no	yes	'84		1912	Office equipment	•				250	3	yes	•			250
RL-614	2,095	7K	12	S	P	no	yes	'83														
RL-620R	2,895	10K	18	S	P	yes	yes	'83														
RL-725RE	4,295	25K	21	S	P	yes	yes	'84														
RL-630RE	4,995	40K	30	S	P	yes	yes	'84														
RL-640RE		50K	40	S	P	yes	yes	'84														
Panasonic (circle 362 on card)																						
FP-1300/1310R	1,895 +	8K	13	S	P	n/y	y/n	'82/83		1960	Electronics				•	500				•		500
FP-1802	2,995	15K	18	S	P	no		'83														
FP-1000		2K	10	S	P	no		'84														
FP-1520		10K	15	S	P	yes		'84														
Pitney Bowes (circle 363 on card)																						
2000/2800	3,695	7K/10K	15	S	P	n/y	yes	'84	1,606	1920	Office equipment	•				131	3	yes	•			600
3800	4,695	10K	20	S	P	yes	yes	'83														
M350/D350	6,295 +	35K	35	S	P	yes	yes	'84														
D460	9,995	50K	46	S	P	yes	yes	'84														
Ricoh Corp. (circle 364 on card)																						
FT6080	9,995	55K	46	S	P	yes	y/n	'84	300	[2]	Cameras, office equipment			•		394		yes		•		294
FT5050/5070	5,495 +	40K	35	S	P	yes	y/n	'84														
FT4085	4,195	25K	25	S	P	yes	y/n	'84														
FT4060	3,595	20K	20	S	P	yes	y/n	'84														
FT3020/3050	2,195 +	10K	15	S	P	n/y	y/n	'84														
M10	1,330	3.5K	20	S	P	no	y/n	'84														
Royal Business Machines, Inc. (circle 365 on card)																						
Royal 1200MC	1,595	3K	12	S	P	no	yes	'84		1904	Office equipment	•				330		yes		•		
Royal 1602MR	4,495	20K	16	S	P	yes	yes	'83														
Royal 2502MR	4,795	25K	25	S	P	yes	yes	'84														
Sanyo Business Systems (circle 366 on card)																						
SFT 802/852	1,795 +	5K	13	S	P	no	no	'84	6,000	1950	Electronics			•		200	6			•		200
SFT 1100/1150Z	2,995 +	10K	15	S	P	yes	no	'83														
SFT 1200/1250Z	3,995 +	20K	30	S	P	yes	no	'84														
Savin (circle 367 on card)																						
5015/5015RE	2,495 +	15K	15	S	P	n/y	yes	'83	360	1959	Office copiers	•	•	•		600	3	yes	•	•		600
5020	3,995	20K	18	S	P	yes	yes	'83														
5030	5,495	50K	30	S	P	yes	yes	'83														
7035	6,895	30K	35	S	P	yes	yes	'84														
7045	10,495	75K	46	S	P	yes	yes	'84														



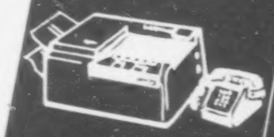
Product profile									Company profile			Sales profile					Service profile					
Manufacturer & model	Mfr's suggested price ($)	Recommended monthly volume	Copies per minute	Sheet (S) or roll (R) fed	Plain (P) or coated (C) paper	Reduction capability	Rent or lease plan	Year introduced	Annual sales (mil $)	Year founded	Primary business	Mfr-direct sales	Mfr-owned outlets	Distributors	Dealers	Number of sales locations	Warranty period (months)	Mfr service contracts	Mfr-direct service	Mfr-authorized service	Other service	Number of service locations
Sharp Electronics (circle 368 on card)																						
Z-60	1,150	1K	6	S	P	no		'84	4,000	1912	Electronic equipment			•	•		V			•		
SF 756	1,595	3K	10	S	P	no		'84														
SF 760	2,495	5K	12	S	P	yes		'84														
SF 816/825/826	4,195 +	25K	25	S	P	n/y/y		'84/82														
SF 900/901	5,995 +	40K	40	S	P	yes		'83/84														
3M Company (circle 369 on card)																						
566	3,595	10K	15	S	P	yes	yes	'83	7,039	1902	Consumer and business products	•	•	•	•		3	yes	•	•		
570	4,395	25K	21	S	P	yes	yes	'84														
583	5,895	40K	30	S	P	yes	yes	'84														
586	7,995	50K	40	S	P	yes	yes	'84														
Toshiba America Inc. (circle 370 on card)																						
BD-3301	1,795	5K	12	S	P	no	[1]	'84	28	1965	Office equipment			•		250	3	yes		•		250
BD-5511	3,995	20K	22	S	P	yes	[1]	'84														
BD-7815/7816	5,395 +	30K	30	S	P	yes	[1]	'84														
BD-8812	7,795	40K	40	S	P	yes	[1]	'84														
Van Dyk Research Corp. (circle 371 on card)																						
6000	27,900	60K	100	R	P	no	yes	'84	5	1964	Copiers, duplicators			•			12	yes	•	•		25 +
5000F	24,300	60K	67	R	P	no	yes	'84														
4000/4100	17,000 +	40K	67	R	P	no	yes	'71/82														
Xerox Corp. (circle 372 on card)																						
1020	1,795	1K-4K	11	S	P	no	yes	'83	8,802	1906	Office products and systems	•		•	•	300		yes	•	•		200
1035	4,195	3K-20K	20	S	P	yes	yes	'83														
1045/1048	6,495 +	4K-25K	40	S	P	yes	yes	'83/84														
1055	14,500	15K-50K	50	S	P	yes	yes	'84														
1075	48,375	24K +	70	S	P	yes	yes	'82														
2350	2,295	5K	10	S	P	yes	yes	'81														
2830	3,195	1K-15K	20	S	P	no	yes	'82														
3300	4,995	1.5K-8K	23	S	P	no	yes	'79														
3450	6,495	8K-25K	30	S	P	yes	yes	'79														
5400	8,200	10K-50K	45	S	P	no	yes	'77														
5600	11,800	15K-50K	45	S	P	no	yes	'79														
8200	40,000	25K-125K	70	S	P	yes	yes	'79														
9210 I	70,000	50K +	120	S	P	yes	yes	'82														
9500/9900	116,000 +	100K +	120	S	P	y/n	yes	'79/84														
Yorktown Industries Inc. (circle 373 on card)																						
Genie 700 HR	895	2.5K	8	S	P	no		'83		1950	Photocopiers and supplies	•		•		1,000		yes	•			
Model J Copier	1,695	10K	12	S	P	no		'84														

V—Warranty period varies

[1] Dealer option

[2] 1936—merged 1984

Facsimile equipment



Product profile													Company profile			Sales profile					Service profile					
Manufacturer & model	Mfr's suggested price ($)	Transmitter	Receiver	Transceiver	Analog signal	Digital signal	Tabletop (T) or console (C)	Max paper size (in.)	Automatic document feed	Transmission speed for 8½ x 11 page	Compatibility group (1,2,3)	Year introduced	Annual sales (mil $)	Year founded	Primary business	Mfr-direct sales	Mfr-owned outlets	Distributors	Dealers	Number of sales locations	Warranty period (months)	Mfr service contracts	Mfr-direct service	Mfr-authorized service	Other service	Number of service locations
Alden Electronics, Inc. (circle 376 on card)																										
Alden model 340 III	3,400			•			T	8.5 x 11	std	1m	3	'84	14	1946	Facsimile equip	•					3	yes	•	•		
Canon U.S.A., Inc. (circle 377 on card)																										
Canon Fax 320e	5,995			•		•	T	11 x any	std	20s	all	'83			Optics and imaging technology	•	•	•			3	yes	•	•		1,500
Canon Fax 330	4,995			•		•	T	8.5 x any	std	22s	all	'83														
Canon Fax S10	3,495			•		•	T	11 x any	std	17s	all	'84														
Exxon Office Systems (circle 386 on card)																										
Exxon Qwip™ 2310	5,845			•		•	T	8.5 x 39.37	std	40s	2, 3	'82		1981	Office automation equipment	•		•		140	3	yes	•	•	•	525
Exxon Qwip™ 2210	2,995			•		•	T	8.5 x 132	na	40s	2, 3	'83														
NEC America, Inc. (circle 378 on card)																										
BIT I/BIT II	4,500 +			•	•	•	T	8.5 x any	std	12s	all	'84	2.2	1899		•				20		yes	•	•		
System II D	3,500			•	•		T	8.5 x any	std	1m	1, 2	'82														
System IIIS/T	4,400			•	•	•	T	8.5 x any	std	40s	all	'83														
Panafax Corp. (circle 379 on card)																										
Panafax PX-100/200	3,995 +			•		•	T	8.5 x any	std	20s	all	'83/84	70	1976	Facsimile equip	•				30	3	yes	•			50
Panafax MV-3000	4,495			•		•	T	11 x any	std	20s	all	'81														
Panafax MV-1200	1,975			•	•			8.5 x 25	opt	2-3m	1, 2	'78														
Ricoh Corp. (circle 380 on card)																										
Rapicom 1000/1500	1,000 +			•		•	C	14/47.5	std	45s	1,3/2	'80	70	1971	**Facsimile equip**	•			•	41	3	yes	•			34
Rapicom 3300	5,000			•		•	T	21.7	std	30s	all	'82														
Rapicom 6300	8,840			•		•	C	59	std	15s	2, 3	'81														
Sanyo Business Systems (circle 381 on card)																										
SF 615	3,795			•		•	T	8.5 x any	std	30s	2, 3	'84	4,000	1950	Electronic business equip	•		•		500 +	3	yes	•	•		500 +
SF 935	4,700			•		•	T	11.7 x any	std	20s	2, 3	'83														
Sharp Electronics Corp. (circle 382 on card)																										
FO-2530/2531	3,495 +	•	•			•	T	11.7 x 39.4	std	40s	2, 3	'84	900	1962	**Industrial equip, consumer elect**				•		3	no		•		
FO-2515/2516	4,395 +	•	•			•	T	11.7 x 39.4	std	20s	2, 3	'84														
Telautograph Corp. (circle 383 on card)																										
Omnifax G96/G99	4,000 +			•		•	c/t	11.75 x any	std	15s	all	'82/83	35	1888	Facsimile, communications equipment	•				50	12	yes	•	•		240
Omnifax G35	2,895			•		•	T	8.5 x 59	std		all	'84														
Omnifax SF3	9,000			•		•	T	11.7 x any	std		2, 3	'64														
3M Company (circle 384 on card)																										
EMT 9145	2,985	•	•	•	•	•	T	8.5 x 14	opt	40s	all	'84				•	•	•			3	yes	•			
EMT 9165	6,500	•	•	•	•	•	T	11 x 17	std	20s	all	'83														
EMT 2700	3,995			•	•	•	T	10.5 x any	std	20s	2, 3	'82														
Xerox Corp. (circle 385 on card)																										
Telecopier 295	4,600			•	•	•	T	9 x any	std	25s	all	'83	8,400	1961	Information products/systems	•				125	3	yes	•			125
Telecopier 495-1	4,600			•	•	•	C	10.2 x any	std	25s	all	'82														